

Rio Tinto

Why cultural heritage matters

A resource guide for integrating cultural heritage management into Communities work at Rio Tinto



About Rio Tinto

Rio Tinto is a leading global business involved in each stage of metal and mineral production. We produce aluminium, copper, diamonds, coal, iron ore, uranium, gold and industrial minerals. We operate in more than 50 countries and employ about 77,000 people, and many more work on our sites in contract roles. Health and safety is a key priority for us and we seek to place sustainable development at the heart of everything we do. We are a global organisation with one set of standards and values, while paying particular attention to the unique needs and aspirations of the communities that host our operations.

Cover

Mr Tseveen Ayush competing in traditional archery at the 2010 National Naadam Festival, Mongolia. Mr Tseveen is the most respected traditional archer in Mongolia and has been recognised by the Mongolian Government as a Distinguished Athlete. Oyu Tolgoi supports the National Naadam Festival which features traditional archery, wrestling and horseracing. The National Naadam Festival has been added to the UNESCO Intangible Cultural Heritage List.

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Contents

1. Introduction	
Forewords	06
About this guide	10
Contributors to this guide	12
Key concepts	14
Introduction	15
2. How to guide	
2.1 Inclusive engagement	22
2.2 Know and understand	28
2.3 Plan and implement	44
2.4 Monitor, evaluate and improve	66
2.5 Report and communicate	80
2.6 Summary	88
3. Background reader	
3.1 Cultural heritage concepts	91
3.2 The business case	100
3.3 Impacts on cultural heritage	104
3.4 International protocols and standards for protecting cultural heritage and diversity	109
4. References	
Acronym list	118
Glossary	119
Rio Tinto's policies, standards and guidances	124
Key websites	125
References	126

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Dancers from the /Abi //Aeb Cultural
Group perform at the Rossing
30 Year Celebration in 2006. The
group's name means 'rain-time' and
their dance style is traditional to this
region of Namibia, Africa.



Case studies

1	Rio Tinto in Weipa, Australia Inclusive engagement at Rio Tinto Alcan Weipa	26
2	Rio Tinto in Jadar, Serbia Involving experts in early desktop review for identifying cultural heritage	34
3	Rio Tinto in Phalaborwa, South Africa Addressing legal requirements while furthering cultural heritage goals	38
4	Rio Tinto in Quebec, Canada Recognising the heritage value of Canada's aluminium industry	40
5	Rio Tinto in Zvishavane, Zimbabwe Planning relocation of significant heritage and honouring cultural needs	52
6	Rio Tinto Aboriginal Fund, Australia Supporting culture beyond our operations	58
7	Rio Tinto in Richards Bay, South Africa Mananga Heritage Centre: a living memorial	60
8	Rio Tinto in the Upper Hunter Valley, Australia Implementing an integrative Cultural Heritage Management System	64
9	Rio Tinto in the Northwest Territories, Canada Incorporating traditional knowledge into scientific monitoring at Diavik Diamond Mine	68
10	Rio Tinto in Oyu Tolgoi, Mongolia Design and monitoring framework: standards of acceptable change	74
11	Rio Tinto in the Pilbara, Australia Continual improvement of heritage performance	78
12	Rio Tinto in Utah, US Promoting industrial heritage values of an operating mine	84
13	Rio Tinto in the East Kimberley, Australia Open and transparent communication at Argyle Diamonds	86

Forewords

Sam Walsh

Chief executive, Iron Ore and Australia

Respect for culture and heritage is integral to the way Rio Tinto conducts business.

Wherever we operate, our businesses work with local and Indigenous communities on the protection of their cultural heritage. We do this because it is the right thing to do and because there is a strong business case for doing so.

We recognise that protecting culture and heritage is important to communities and, therefore, it is important to us. This is why we engage so thoroughly with our host communities to build strong relationships, understand cultural heritage values and manage the local and regional impacts of our operations.

What I have particularly noticed with this work is its breadth and complexity, as well as the considerable internal effort that it takes to get it right. We dedicate highly skilled people and invest substantial financial resources in cultural heritage management.

We are also clear about the need to fully integrate this work across all parts of our businesses to achieve the best outcomes.

As the case studies in this guide demonstrate, there can be significant cultural heritage threats and opportunities in the diverse areas in which we operate. This is often a complex and challenging environment, for which the experience and stories from others can certainly be most helpful.

I am sure that you will each have your own stories about community engagement. Each will have as a backdrop the overall commitment of your business and your operation to culture and heritage protection, as well as to the related capabilities and systems.

A common and practical guide that reflects our cultural heritage management approach is most important. Even more so that it has been developed over many years of robust engagement with communities the world over.

It is a guide for all Rio Tinto operations, including those activities associated with exploration, with integrated mining and with smelting and other processing.

I commend this guide as a resource for not only the Communities staff of Rio Tinto, but also for all employees involved in project development and land management work – indeed, to those more broadly in our businesses. It is a practical toolkit that will help you to better understand cultural heritage considerations and incorporate them into your planning and programming.

I would like to think that this guide will enrich your understanding and in turn lead to more effective collaboration with our host communities, particularly to protect and perpetuate their cultural heritage.



Forewords

Bruce Harvey

Global practice leader, Communities and social performance

At Rio Tinto we recognise the fundamental role that culture and heritage plays in our engagement with local communities.

We know that culture is the basis of all social identity and development, and cultural heritage is the endowment that each generation receives and passes on. We understand that protecting and managing cultural heritage assets jointly with communities contributes to the quality of our relationships. Greater attention to cultural heritage helps us be more effective in our community engagement and enhances our legacy.

We want to increase the level of trust our host communities have in us. We can build trust through the protection and celebration of cultural heritage and going beyond compliance with cultural heritage provisions in the UN Declaration on Human Rights. Celebrating the distinct cultural achievements and heritage of our host communities provides a foundation of confidence and trust. This foundation enables us to work in partnership with our host communities to ensure they benefit from the sustainable economic opportunities provided by our activities. This is the essence of Rio Tinto's sustainable development objectives.

In recent times we have made significant advances in community engagement practices. We are building a solid architecture of policies, standards and systems that facilitate engagement and sustainable economic and social outcomes for host communities. Recognition of our host communities' culture and heritage is explicit in our Communities policy and standard, which clearly state our businesses' responsibility to protect and help maintain cultural heritage.

The complexity and variability of cultural heritage in the many places that we operate has highlighted the need for additional guidance to complement our existing tools and guidelines on cultural heritage management. Cultural heritage

considerations cut across all stages of an operation's lifecycle, from exploration through to closure, and many operational dimensions, such as community relations, environment and land management, mine planning and human resources. This guide outlines cultural heritage management considerations through all of these stages and dimensions.

At Rio Tinto we place great importance on our relationships with host communities but we know that we do not always achieve the outcomes that we and others want. Some of our businesses have engaged with host communities to achieve very positive cultural heritage outcomes but others have further progress to make. Some achievements are highlighted in the case studies in this guide and we plan to build on these.

Rio Tinto is committed to respecting human rights, including the potential impacts of our activities on cultural identity and heritage. We recognise the fundamental human right that all communities have to cultural life and heritage, and the ways in which our activities could affect this. We recognise that without appropriate cultural heritage management our presence and the resulting economic and societal changes have the potential to devastate rich local cultures and heritage,

leading to escalating social stress and harm. Furthermore, the effectiveness of our broader community engagement can be limited by not adequately identifying and incorporating important cultural considerations. And, by focussing entirely on conventional economic options, such as mining employment and business development, we can negate communities' ability to access the many social and economic opportunities arising from their cultural heritage.

This guide will help all of our operations improve their understanding of cultural heritage values and how, with guidance from communities and stakeholders, they can manage any potential impacts. As we improve our understanding of how our activities affect cultural heritage, we can improve our decision making processes. This will help us progress towards our goal of making an enduring positive impact on the economic and social development of our host communities and nations.



About this guide

This guide is written for Rio Tinto employees and managers working on cultural heritage¹ issues. They may be employed explicitly in cultural heritage roles, be members of Communities², Environment or Human Resources departments, or be engaged in projects or other work which encounters cultural heritage matters. The guide has been developed in response to requests from our employees for tools and advice to guide them in how to deal with and manage cultural heritage issues that affect and are affected by our activities.

This guide provides practical information and advice in two parts.

The 'How To' section – This provides clear direction on how to integrate cultural heritage considerations into our work. It includes case studies from Rio Tinto's experiences which illustrate good practice across the Rio Tinto Group in different operational contexts.

The Background Reader – This provides detailed information on various aspects of cultural heritage management. It includes definitions of concepts, a business case for valuing cultural heritage, impacts of mining and processing on cultural heritage, and international protocols related to cultural heritage.

To ensure it reflects best international practice and concepts on mining and metals production and cultural heritage management, this guide has been reviewed by:

- an Internal Working Group, consisting of Rio Tinto employees from different businesses, corporate functions and regions; and

- an External Review Panel consisting of eight international experts in cultural heritage management and mining issues.

External Review Panel members were drawn from Africa, Europe, Australia, and North and South America. Their insights and suggestions have been invaluable and were included wherever possible, although some points of difference remain. The listing of Review Panel members does not therefore imply their full endorsement of the content.

Developing the case studies for this guide especially enabled Rio Tinto employees to study the cultural heritage approaches of other operations and to identify areas where they would like formal guidance. It provided an opportunity for employees to describe community concerns over the management of cultural heritage and to ensure that the guide is sensitive to these concerns. This means that Rio Tinto's actual experience of cultural heritage management at different operations is incorporated into this guide and the content is relevant to practitioners working in the field.

The roll-out of the guide is important for ensuring "take up" at the operational level and for continuing an active conversation across Rio Tinto about good cultural heritage management and why it is important.

Notes on language:

For the purposes of this guide, the following terms are used as described, unless otherwise stated to make a specific point:

- **Operations** refers to all phases of Rio Tinto exploration, projects, construction, production, closure.
- **Activities and operational activities** refers to activities that Rio Tinto may carry out during any of those phases, including drilling, access tracks, hydro dams, mining, smelters, refineries, etc.
- **Site** refers to a cultural heritage site.
- **Cultural heritage feature** includes places, objects and practices.

1. Key terms are defined in the Glossary, p 143.

2. Communities, with a capital "c", refers to the Rio Tinto Communities function or to Communities as a professional discipline (see Glossary).



Above
A special Manthe held at the entrance to the underground project of the Argyle diamond mine. The Manthe ceremonies are conducted by Traditional Owners to confer safe passage of employees through the traditional lands and provide an introduction to the cultural significance of the site.

Right
Traditional Dene handgames were among events at the Lutsel K'e community spring carnival, which was supported by Diavik Diamond Mine. Lutsel K'e, located on Great Slave Lake in Canada's Northwest Territories, is one of several northern communities that Diavik partners with to ensure local community benefits are realised from our operations.



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External Review Panel

Rio Tinto felt it was important to incorporate perspectives from outside the company in the development of this guide. An External Review Panel was established comprising experts in the field of cultural heritage. The role of the panel was to advise and challenge Rio Tinto's thinking, suggest key resources and literature for review and provide critique at key points in the process. While it was not possible to incorporate all of the feedback, the panel's input has been invaluable.

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Case study 11
Rio Tinto Iron Ore – Pilbara
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Case study 12
Kennecott Utah Copper
Piper Rhodes

Case study 13
Argyle Diamonds
Rowena Alexander

Key concepts

This guide is founded on the following essential cultural heritage management concepts:

Wide variety

There is a wide variety of cultural heritage. It can be tangible, such as buildings, landscapes and artefacts; and intangible, such as language, music and customary practice. It is not just old things, pretty things, or physical things and it often involves powerful human emotions.

Business value

Effective cultural heritage management can add great value to our business. It is critical for land access and operations throughout the life of the business. If not well managed, it can delay or even prevent project development.

Fit for purpose

Cultural heritage management work must be adapted to suit the needs of each individual situation: the cultural heritage context and the business type and risks. There is no one-size-fits-all model.

Integration

Cultural heritage management needs to be integrated across business systems, procedures and practices at every site.

Relationships

Sound cultural heritage management is integral to relationships with communities. If you value what they value, then the community is more likely to support you.

Managing change

Cultural heritage is not static. Just as culture changes over time, management approaches need to be dynamic and adapt with it.

Mutual benefit

Effective cultural heritage management can have wide economic, social and environmental benefits.

Introduction

At Rio Tinto we recognise and respect the significance of the cultures and heritage of our host communities, wherever we operate. The integration of cultural heritage management considerations into all of our Communities work and across all sections of the business is fundamental to achieving the key objective of our Communities policy and standard: to build enduring relationships with host communities that are characterised by mutual respect, active partnership and long term commitment.

Cultural heritage is about far more than 'stones and bones' from the past. It is all the aspects of a community's past and present that it considers valuable and desires to pass on to future generations. The term incorporates places, objects and practices of cultural significance. It thus includes 'tangible heritage', such as buildings, industrial structures and technology, landscapes and artefacts and non-visible cultural heritage features such as buried archaeological sites, and 'intangible heritage', such as language, visual art, music, performance, religion, beliefs and customary practices like hunting and gathering. Cultural heritage is not just about old things. New or newly altered objects, places and practices are just as much a part of cultural heritage where they hold cultural value for today's generations.

Cultural heritage management involves the actions taken to identify, assess, decide and enact decisions regarding cultural heritage. It is undertaken to actively protect culturally significant places, objects and practices in relation to the threats they face from a wide range of cultural or natural causes. It may result in the documentation, conservation, alteration or even loss of cultural heritage. It can also include working with communities to protect and enhance their culture and its practices.

The Rio Tinto Communities standard and Cultural heritage management standard for Australian businesses outline Rio Tinto's cultural heritage management requirements. The Rio Tinto Cultural heritage management guidance notes provide detailed advice for meeting these requirements. This guide, developed with cultural heritage management expertise and containing good practice case studies, provides a practical resource for Rio Tinto employees to better understand and more effectively undertake cultural heritage management as part of their Communities work.

Why is cultural heritage management important to Rio Tinto?

Cultural heritage is fundamental to the identity of our host communities and is an integral feature of every landscape we seek to explore, develop or operate. The way we engage with communities and stakeholders to protect and manage their heritage greatly affects the quality of our relationships, the effectiveness of our broader community engagement and the sustainability and legacy of our operations. For this reason, Rio Tinto has for more than a decade placed a very high priority on understanding and managing cultural heritage well.

We know from the past history of mining that ineffective management of both tangible and intangible cultural heritage can lead to conflict. We recognise that our activities often bring profound socioeconomic change to an area and are sometimes responsible for the transition from subsistence living to modern industrial living. This change to forms of social life, beliefs, language usage, customs and practices, as well as the actual destruction of cultural heritage sites, can cause strong feelings in the affected community. Any direct or indirect damage to cultural heritage can lead to social, political and legal opposition to operations.

Cultural heritage programmes contribute to economic development, social stability and environmental protection. Rio Tinto is committed to ensuring its cultural heritage activities contribute to broader community aspirations and desires as well as to business outcomes, consistent with the United Nations Millennium Development Goals as stated in Rio Tinto's global Communities target. Recognition of culture is also essential to the implementation of most of our community programmes.

Managing cultural heritage impacts well is therefore a primary concern for Rio Tinto's development projects and operations. Because of the value cultural heritage holds for communities, as well as governments and other bodies, its sound management can:

- demonstrate respect for a community's values;
- help build sound community and stakeholder relationships and achieve sustainable developments;
- benefit the community economically and socially into the future;
- reduce business threats by minimising exposure to project delays, legal action and compliance costs;
- hasten access to land and acquiring approvals, enhance negotiation of agreements, reduce costs related to negotiations and compensation; and
- enhance the public standing of Rio Tinto and its individual businesses.

Our approach to cultural heritage management

At Rio Tinto we recognise that cultural heritage must be managed in a fashion that encompasses all the many possible ways people interact with their landscape and culture. It is not only about preserving individual sites, but must also look at the essential features of culture itself.

Cultural heritage management is, therefore, the process through which we account for cultural heritage features and values within an operation's area of influence, and then act to reduce damage and/or protect and enhance these features and values. Rio Tinto understands that cultural practices, beliefs and associations with places, objects and practices are constantly changing. Mining activities contribute to, and can accelerate, these changes both directly and indirectly. Our approach to cultural heritage management acknowledges that we need to consider and manage change and impacts so that the heritage values of places, objects and practices are maintained at a level acceptable to the relevant communities and stakeholders.

Cultural heritage management for Rio Tinto businesses is broader than just managing the impacts of ground disturbance: it includes consideration of the people and places in the areas adjacent to Rio Tinto's managed land. As such, we work hard to manage cultural heritage by engaging with relevant communities and stakeholders. This includes working with communities to identify, assess and manage places, objects and practices of cultural significance.

Cultural heritage considerations are a part of Rio Tinto's broader Communities work – but they often also require stand-alone procedures and plans. Our requirement that businesses develop and implement a cultural heritage management

system (CHMS) ensures that Rio Tinto's holistic approach to cultural heritage is formally managed in a similar way to other parts of its businesses. The successful implementation of a CHMS depends on the existence of integrated systems and communication and engagement across the business's many functions.

It is important to note that different levels of work will be required at different phases through exploration, project studies and development, construction and operations and closure. For exploration, more specific guidance is provided in the Rio Tinto Exploration Procedure Communities. For projects, refer to the Rio Tinto Communities and Social Performance guidance for Projects for specific detail on what to do at each project phase. There will also be different systems requirements for the varied contexts in which we operate, such as indigenous and traditional lands, developing countries, and greenfields through to expansion in existing industrial locations.

Expert professional cultural heritage management input is required for cultural heritage baseline and risk assessment work to determine what level of work and system is appropriate. Information on cultural heritage also needs to feed into our Social Impact Assessment and Environment Impact Assessment work and management plans and be captured within business risk assessment processes.

How effective is your current cultural heritage management system?

The following questions can help you assess the current status of your operation's CHMS and the effectiveness of your management in relation to cultural heritage issues.

Checklist	
[✓]	Are you aware of the legal framework within which cultural heritage management needs to occur? What are the international, national and regional laws in relation to cultural heritage?
[✓]	Does legislation covering other areas such as environment, mining or land rights link to cultural heritage requirements?
[✓]	Has a cultural heritage assessment been conducted on all existing lands owned, leased and/or managed by the business? This includes non-mining leases and previously developed land.
[✓]	Was specific cultural heritage survey work followed by a 'significance assessment' conducted in consultation with a broad range of stakeholders and experts?
[✓]	Did a social impact assessment for the operation consider both direct and indirect impacts to tangible and intangible cultural heritage and identify programme areas to enhance cultural practices?
[✓]	Did environmental baseline assessments for the operation consider cultural heritage issues including matters where traditional or local knowledge could help in environmental monitoring or rehabilitation?
[✓]	Has heritage work drawn on archaeological, anthropological, ethnographic and historic sources or experts to ascertain the array of heritage concerns for the operation?
[✓]	Did a cultural heritage baseline assessment examine the different impacts of the project on different ethnic and/or cultural groups?
[✓]	Was a broad range of community members consulted including men and women, old and young people, as well as people from different cultural, ethnic, political or religious groups? (Note that people living outside and sometimes a long way from the operation can have strong/key interests in the area's cultural heritage and so measures are also needed to identify and include them.)
[✓]	Did the baseline assessment consider a diverse range of stakeholders including both non-indigenous as well as indigenous heritage values where applicable?
[✓]	Did the baseline assessment consider the heritage values of the operation itself?
[✓]	Have cultural considerations been considered in closure planning, such as rehabilitating land to accommodate cultural concerns or the repatriation of cultural material?
[✓]	Have cultural heritage management procedures been identified, developed and implemented to manage the operation's potential cultural heritage impacts and risks?
[✓]	Are all relevant employees aware of the contents of cultural heritage or environmental agreements or systems under which they operate?
[✓]	Does the operation have cultural heritage targets for monitoring progress and activity?
[✓]	Have non-local employees and contractors participated in a cultural induction and know how to avoid acting in culturally inappropriate ways?
[✓]	Have Human Resources or other appropriate personnel identified significant cultural events or practices that could be impacted by the operation's work rosters and practices?

Four phases of cultural heritage management

An effective CHMS involves the components and considerations set out in the following four phase framework.

Inclusive engagement

Ensure that community members and stakeholders are:

- involved in cultural heritage assessments and in management decisions; and
- consulted on impacts and opportunities.

Ensure that cultural awareness is promoted internally and that information is shared and integrated across operational functions.

1. Know and understand

Establish the knowledge base needed to shape and drive the operation's cultural heritage management approach and cultural heritage management system.

Identify and understand cultural heritage values, their significance and appropriate management options, through cultural heritage assessment and surveys with the community (including within the operation's socioeconomic knowledge base, social impact assessment and social risk analysis).

Identify and understand the operation's potential impacts upon cultural heritage values.

Understand appropriate management options by drawing on the knowledge base in consultation with community members, heritage experts and other stakeholders.

2. Plan and implement

Develop cultural heritage management procedures and systems appropriate to the operational and cultural heritage context.

Use Rio Tinto planning tools such as Communities multi year plans and specific cultural heritage management plans to implement the operation's cultural heritage management system effectively.

Ensure cultural heritage management considerations are integrated into all relevant operational plans and procedures, such as ground disturbance permit systems, human resources policies, health and safety procedures and environmental management programmes.

Contribute to the socioeconomic development of the region and meet Rio Tinto's global Communities target by effectively implementing cultural heritage programmes.

3. Monitor, evaluate and improve

Set targets and indicators to monitor the impact of the operation on cultural places, objects and practices, and the overall performance of the cultural heritage management system.

Use the results of Communities site managed assessments, cultural heritage management system audits and complaints mechanisms to continually improve performance.

Develop participatory monitoring and evaluation processes that include Rio Tinto employees, heritage experts and the community custodians of the heritage.

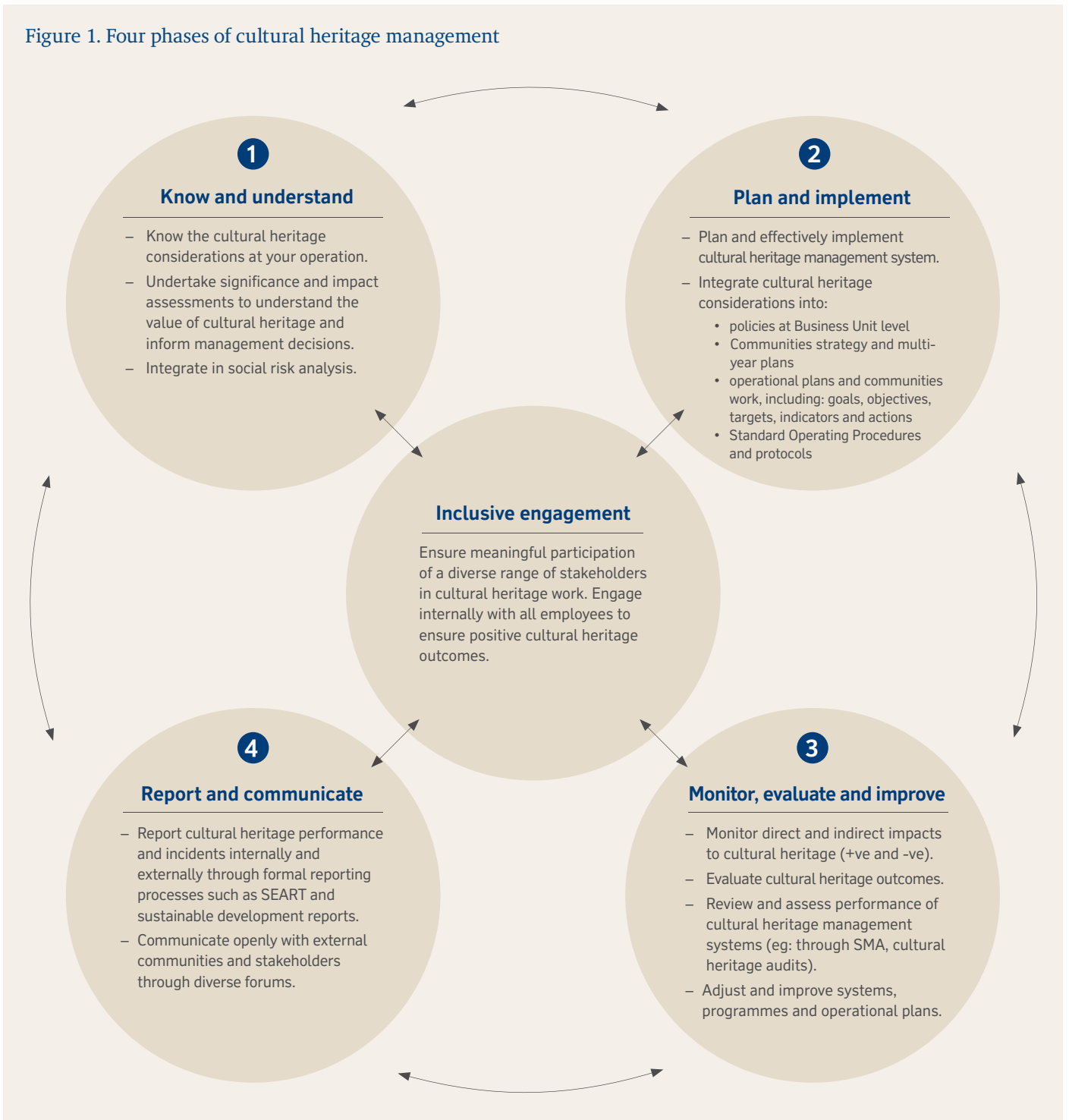
4. Report and communicate

Report on the operation's cultural heritage projects and incidents both internally, through SEART (Rio Tinto's Social and Environmental Accountability Reporting Tool), the Business Solution and the Communities workbook, and publically through sustainable development reports.

Communicate directly with community members and Rio Tinto employees and contractors, using culturally appropriate and accessible means.

Publish the cultural heritage management outcomes, the cultural heritage and its values more broadly through academic or public means, while respecting intellectual property or privacy requirements of the owners.

Figure 1. Four phases of cultural heritage management





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2. How to guide

2.1 Inclusive engagement	22
2.1.1 Consultation contributes to inclusive engagement	24
2.1.2 Internal engagement	25
2.2 Know and understand	28
2.2.1 Develop the cultural heritage knowledge base	29
2.2.2 Understand cultural heritage risks	30
2.2.3 Undertake cultural heritage assessments	31
2.2.4 Cultural heritage management – drawing on the knowledge base	42
2.3 Plan and implement	44
2.3.1 Cultural heritage management plans	46
2.3.2 Implementing management actions	48
2.3.3 Protecting intangible cultural heritage	56
2.3.4 Integration of cultural heritage across the business	62
2.4 Monitor, evaluate and improve	66
2.4.1 Monitoring – “How are we doing?”	66
2.4.2 Targets and indicators for monitoring	70
2.4.3 Evaluation and continual improvement – “How did we do and how can we do better?”	76
2.5 Report and communicate	80
2.5.1 External reporting	80
2.5.2 Internal reporting	82
2.5.3 Communicate	82
2.6 Summary	88

Left

Discovery of trading by John Bulunbulun and Zhou Xiaoping, 2009. This painting is part of the Trepang: China & the story of Macassan-Aboriginal trade exhibition. The exhibition includes historical artefacts and contemporary artworks to tell the little-known history of the trade in trepang (sea cucumber) between the Chinese, Macassan and Australian Aboriginal cultures in the 18th to 20th centuries. Rio Tinto has supported the exhibition in China and Australia as part of the two-year cultural exchange programme between the countries.

2.1 Inclusive engagement

At Rio Tinto engagement means the active exchange of information, listening to concerns and suggestions and developing an agreed way forward together. Engagement is therefore much more than consultation. Engagement should be inclusive and ongoing and used to inform and guide how cultural heritage management is conducted at all phases of our projects and operations.

Effective cultural heritage management requires the active participation of the community in any decisions affecting their cultural heritage. It also requires that community values and concerns are heard and respected by all relevant departments within our businesses.

The values that communities hold for specific places, objects or practices and the impact of operational activities on these values may not be visible to people who are not a part of the local community. Inclusive engagement ensures that community members and other

stakeholders are involved in identifying and managing their cultural heritage.

Involving community members in our decision-making processes helps Rio Tinto employees to identify opportunities where cultural heritage work can contribute to our broader community objectives. For example, it can enable us to help in the revitalisation of traditional cultural practices.

Inclusive engagement also means communicating across the business to ensure that everyone is working to manage cultural heritage. Often the distinction

between internal and external parties is blurred, as local employees are likely to have their own connections to and views on a region's cultural heritage.

We believe that inclusive engagement should continue throughout the long life span of exploration, development, mining and processing, and closure and completion. This means that the issues and the people responsible for cultural heritage, both inside and outside the company, will change over time, as may their perception of risk and impact to cultural heritage.

Checklist	
[✓]	Is a broad range of local people and other stakeholders involved in the identification and valuation of cultural heritage at our operations? ie: including 'non-local locals' with a stake in heritage in operational area?
[✓]	Are cultural heritage management decisions based on wide ranging consultation with the people who value the cultural heritage and cultural heritage experts where applicable?
[✓]	Are there processes in place for communicating cultural heritage decisions and impacts with our external stakeholders?
[✓]	Are these communication processes open and accessible, directed to the appropriate people, written or spoken in appropriate language and conducted in appropriate venues?
[✓]	Is there an appropriate mechanism for community members to report their complaints to us?

Inclusive engagement in cultural heritage brings with it many challenges, as outlined below. These need to be resolved as far as possible so everyone is treated consistently and fairly.

Factors that hinder inclusive engagement

Misconceptions about heritage	The idea that cultural heritage is mostly an indigenous issue or is only related to material resources or historic items can influence who we engage with. Failure to recognise that cultural heritage management is about intangible cultural values as well as physical objects and places can cause significant impacts and lost opportunities.
Access to individuals	In many situations, heritage legislation or individual community agreements define who should be consulted in relation to heritage issues. This means that often the same people are consulted while others may be excluded. While regulatory protocol must be followed, broader consultation is desirable to ensure that the engagement process includes all those who are concerned. Where regulations do not stipulate who to consult, broader consultation is recommended. Some vulnerable and marginalised groups may be hard to reach for various reasons. Work demands or schedules may prevent some people from engaging, as may issues such as consultation fatigue, disputation and family circumstances.
Cultural protocols	Cultural protocols can prevent women or young people participating (speaking out) fully in meetings where men or elder people are present. This can prevent their views and concerns from being heard.
Time/workload	Workloads and project timelines can prevent employees from engaging fully.
Access to information	Knowledge about some cultural heritage may be restricted to a certain group, making individuals unable to divulge the whereabouts or the significance of certain objects, places and practices. It may be restricted by gender, age or affiliation. Regular consultation by appropriate employees, and heritage experts as required, can be necessary to be sure that all relevant cultural heritage concerns are identified.
Legislative requirements	In some jurisdictions, the law requires that heritage consultations be conducted by the relevant government agency. Consultation run by a third party may not satisfy the Rio Tinto Communities standard, nor produce positive relationships with affected communities. Where working through a third party may reduce the quality of the consultation and/or relationships between the operation and the community, opportunities to supplement this consultation should be considered.
Logistical constraints	Remoteness, extreme climatic conditions, knowledge and education (both linguistic and procedural understandings), cost, distance, information flow (being isolated from communication channels) and other factors can make engagement difficult. Internally, funding and time restrictions can prevent effective engagement across functions within an operation.

Achieving inclusive engagement means that:

- all people in a community who have knowledge of cultural heritage have the opportunity to express their views in culturally appropriate forums;
- we share with the community, in an easily accessible form, information about cultural heritage that the operation has obtained (eg: through surveys);
- communities have access to agreed complaints, disputes and grievance processes to raise with us any cultural heritage concerns or complaints that they may have (see Rio Tinto

Communities complaints, disputes and grievance guidance);

- we keep communities informed of any decisions that affect their cultural heritage and of how concerns or complaints are being addressed; and
- we use community input to shape responsive changes in our operations and their management.

Box 1 highlights the broad range of communities and stakeholders who may need to be considered in order to achieve inclusive engagement.

1. Who to engage with

The Rio Tinto Cultural heritage management guidance note states that consultation should include the full range of stakeholders involved in an area’s cultural heritage including, but not limited to: historical or traditional users and owners of the cultural heritage, local communities, indigenous and minority peoples, descendent families, government agencies, religious institutions, national and local museums and cultural institutes, the scientific community, local historical groups and NGOs.

2.1.1 Consultation contributes to inclusive engagement

There are many ways to engage with a community. Any process in which employees and community members talk openly with each other can improve our understanding of community concerns.

Consultation, conducted in ways that are culturally acceptable to the communities concerned, is a key aspect of this (see Rio Tinto Consultation and engagement guidance). We develop a consultation approach at the outset, which can be adapted as we learn more about a community. It specifies who needs to be consulted, their connections to cultural heritage and sets a timetable that emphasises consultation from the earliest stages of project conception.

Cultural heritage intersects with other aspects of diversity, including age, gender, class, ethnicity, family, politics, religion, economic and marital status. All of these factors can influence how people value certain places, objects and practices and all should be taken into account during the process of community and stakeholder engagement.

Sometimes knowledge about cultural heritage is restricted to one group in the community and its members may not wish to share all their information with employees or with employees of a particular age or gender. Experts and managers should be mindful of these wishes and be able to assess significance without the disclosure of culturally sensitive

information. It is extremely important to respect people's right to privacy and to recognise that cultural knowledge is the intellectual property of those who hold it.

Sometimes there is no common view of the value or importance of cultural heritage features, even within a family group. Our role is not to take sides in such debates – the process of inclusive engagement makes it possible for different values and/or conflicting views to be heard and accommodated. Other approaches that foster inclusive engagement are listed in box 2.

2. Activities that contribute to inclusive engagement

- Hold regular consultation proactively with a view to building effective relationships.
- Gain an understanding of the cultural and social structure and protocols of the community(s), so that the right people are involved in cultural heritage discussions, but the range of community views is covered.
- Ensure regular access to the operation so community members can see how cultural heritage management is being implemented.
- Involve community members in key project milestones and activities such as conducting appropriate ceremonies at key events.
- Use and promote local languages, for instance dual or multi language signage.
- Involve community members in relevant monitoring and evaluation processes across the operation.
- Share success stories and lessons learnt with other business units.
- Provide cultural awareness training, based on the local context, for all employees.

Adapted in part from Aboriginal engagement and resource development leading practice guide produced by Rio Tinto

2.1.2 Internal engagement

Internal engagement, conducted by cultural heritage and Communities practitioners, is just as important as external engagement. This engagement is critical to ensuring that operational activities that are not under the direct management control of the cultural heritage and Communities experts meet cultural heritage requirements.

To manage and protect cultural heritage there needs to be clear communication between various operational areas so that employees and contractors:

- commit to and support cultural heritage procedures;
- support external engagement programmes;

- act in culturally appropriate ways; and
- act in compliance with cultural heritage management system procedures.

Box 3 gives a creative example employed by Rio Tinto Coal Australia to increase the cultural awareness of its employees.

Rio Tinto Alcan's Weipa operation in north Queensland, Australia, featured in case study 1 (page 26), provides an example of the diverse approaches to engagement around cultural heritage and the benefits that have resulted.

3. Hail Creek walking track

In 2009, Rio Tinto Coal Australia's Hail Creek Mine created an interpretive walking track that leads from the employee accommodation village to the mine. This track is used by employees on their way to and from work. The track was designed in consultation with local Traditional Owners, the Wiri Yuwiburra people.

The walking track represents an attempt to promote awareness of Aboriginal heritage among all employees. Simultaneously, the walking track functions as a 'living' keeping place for some of the heritage items relocated from the operation. Signage along the track explains the significance of each item.

The aim is to encourage employees to learn more about the cultural heritage of the region and develop a greater appreciation of Wiri Yuwiburra culture.



Left
Hail Creek walking track, Queensland, Australia. The track was designed in consultation with the Wiri Yuwiburra Traditional Owners to promote employee's awareness of Aboriginal heritage.



Weipa
Australia

Case study 1: Rio Tinto in Weipa, Australia

Inclusive engagement at Rio Tinto Alcan Weipa

The Weipa and Andoom bauxite mines are located in Weipa on the Cape York Peninsula in North Queensland, Australia. Mining has been active in the area since the late 1950s. Rio Tinto Alcan plans to expand mining into the East Andoom area, which has not previously been mined. Although mining is not scheduled to begin until 2011-2012, a community, heritage and environment management plan was developed well in advance, identifying key management issues and initiatives.

Challenge: Managing cultural heritage with other business obligations

In the Weipa region, the cultural heritage concerns of the Traditional Owners extend beyond archaeological sites to a strong and active spiritual connection to land and to an overall cultural landscape. Thus, cultural heritage management in Weipa is closely connected with issues of the land, entailing significant rights and responsibilities of Traditional Owners over natural resource management. The effective management of cultural heritage at Weipa requires the consideration of the entire cultural landscape as opposed to managing cultural heritage as disconnected objects. This in turn requires the inclusive engagement of a variety of concerned parties, including Rio Tinto Alcan's environment department. The challenge for the company is to address its cross functional obligations in a complex social and natural landscape with strong intangible cultural heritage values.

Process: Engage externally and internally

The development of the East Andoom Communities, Heritage and Environment Management Plan required an integrated and inclusive engagement approach by Rio Tinto Alcan to ensure that the Thanikiwithi people's concerns about cultural heritage and environmental management were incorporated into the plan well before any site work commenced.

Specifically, the Traditional Owners raised concerns over the recreational use of Vyces Crossing by Weipa residents and tourists. To the Thanikiwithi people, Vyces Crossing is a customary site used to welcome visitors to their land through a brief ceremony. While the Thanikiwithi people were comfortable for the site to continue to be used by the public, they expressed concerns about the environmental damage caused by 4WD vehicles driving on the creek bank, as well as people leaving their rubbish behind. Rio Tinto Alcan acknowledged these concerns as both a cultural heritage and a land management issue.

To address them, the Rio Tinto Alcan community relations and environmental departments worked with the Traditional Owners to introduce traffic control barriers to restrict people from driving on the river bank, including a designated parking lot with bollards. Educational materials were developed to engage and inform all employees and the broader community of the significance of Vyces Crossing to the Thanikiwithi people. These include interpretive signage and information pamphlets, which focus on communicating the site's cultural significance to those who use it. In 2010 a calendar was produced displaying local traditional knowledge and outlining the company's and community's monthly management requirements. The materials also explain that continued access to the site depends on the goodwill of the Traditional Owners.



Outcome: Integrated and inclusive management of Vyces Crossing

Inclusive engagement is needed to understand heritage issues at any operation, especially to identify appropriate management options for culturally significant places. In the case of the East Andoom Management Plan, the engagement process included consultation with the Traditional Owners and other Thanikiwithi people, and environment practitioners in addressing heritage issues associated with land management. This also involved engaging the broader Weipa community to ensure their behaviour is culturally sensitive and in line with the wishes of the Traditional Owners.

The result of this inclusive engagement has been the development of an integrated management plan, the production of positive environmental outcomes in terms of land and water management, and the strengthening of relationships between the operation and the Traditional Owners.

1

Negwer - Vyces crossing is a significant place to us, the Thanikwithi people. Vyces is a healing place and can help you recover if you are sick. It is also a very important place for carrying out Traditional ceremonies and blessings.

Negwer - Vyces crossing





Negwer is of great cultural significance to Thanikwithi Traditional Owners. The area is part of an important story place (oral history site) and also contains a number of scattered trees for the making of spear throwers (Womemal) and harvesting of sugarbag. During archaeological surveys stone tools representing the locations of old camp sites have also been found along the creek. All these items are of value to the Traditional Owners and should not be picked up or disturbed.

Negwer is also a story place about mother Bundicoot who learnt how to weave baskets using the Wollem grass and taught others how to weave.

Remember you are on Rio Tinto Alcan Mining Lease and are not permitted to enter operational areas or drive along haul roads.

Negwer is our home so please help us look after this important place.

As Traditional Owners we have to look after the area we do this by respecting the environment. We don't drink alcohol at this important place and we always taking out rubbish here.

We never use guns out bush as there are people doing work for RTA Weipa, people hunting and fishing out bush and they could get hurt.

We always ask our elders for permission before camping overnight.

When we drive to the area we stay on formed tracks. We never drive close to the creeks as that would cause the creek to become damaged. If the ground looks too wet we park well away from the creek and walk the rest of the way.

Traditional Owners and RioTinto Environment team work together to do controlled burning in the area. This is cool burning and prevents hot fires that can burn out of control and damage the environment.



*My name is
of the
and
BESSIE
of
K. J. Hall
STEVE HALL*

Top
Senior Thanikwithi Elder Steven Hall and Rio Tinto Alcan heritage liaison officer Amanda Woodley collecting shell samples from a midden for radiocarbon dating. The midden is approximately 500 years old.

Above
Information brochure on the cultural significance of Vyces Crossing. The Thanikwithi traditional owners and Rio Tinto Alcan jointly produced the brochure and other educational materials about Vyces Crossing.

Circle
Shells on the surface of a midden.

2.2 Know and understand

Knowing the places, objects and practices that are important to communities, and understanding why these are valued, is the foundation for a sound cultural heritage management system.

At the very outset operations should seek to build their knowledge and understanding of:

Rio Tinto's standards and guidance relating to cultural heritage

- Communities standard, Cultural heritage management standard (Australia) and applicable guidance documents

Heritage legal framework

- What are the legislative and regulatory requirements for cultural heritage?
- Are there customary laws that determine cultural heritage requirements?
- Are there industry specific protocols or standards that apply?

Communities and stakeholders

- Who has heritage interests in the operation's lease area and adjacent areas?
- How do values differ between groups?
- How does the legislative context affect who should be consulted?

Tangible cultural heritage

- Which places, objects and natural resources are considered significant?
- Why are they significant?

Intangible cultural heritage

- Which cultural practices and values are likely to be impacted by operational activities?
- How are cultural practices and values linked to tangible cultural heritage in operational areas?
- How can we support the maintenance and celebration of cultural practices and beliefs?

Appropriate management processes

- How does the value associated with places, objects and practices influence how they should be managed?
- How can good management of cultural heritage contribute to our commitments to local and regional economic growth consistent with the Millennium Development Goals and our sustainable development objectives?

Checklist

- [✓] Does the operation maintain a register of all cultural heritage requirements?
- [✓] Does the operation maintain a register of all tangible cultural heritage features on the land that they manage and are the locations of these features maintained in the internal Geographic Information System (GIS)?
- [✓] Are all industrial and historical heritage features and values of the operation itself documented?
- [✓] Does the operation have an understanding of intangible cultural values that are important to the community and how these can be promoted?
- [✓] Do all baseline assessment tools feed into and inform each other in relation to cultural heritage and cultural concerns of the local community?
- [✓] Have all potential stakeholders been identified?
- [✓] Have potential cultural programme areas been identified based on the cultural values of the local community?

2.2.1 Develop the cultural heritage knowledge base

Developing the knowledge needed for effective cultural heritage management takes time and should begin at the project exploration or conceptual stage. Developing and regularly updating a relevant knowledge base is a requirement of our Communities standard.

The knowledge base enables an operation to plan properly and to monitor, review and evaluate its cultural heritage performance. Rio Tinto uses a very broad definition of what constitutes “cultural heritage”. This requires different surveys and assessments to build the knowledge base. At each stage of this process, assessments and surveys should be undertaken by professionals and may be subject to specific legal and specialist methods and requirements.

Communities assessments – socioeconomic situational analysis or social and environmental impact assessments can identify cultural practices and assets of concern to communities, which may be affected by the operation’s activities.

Specific cultural heritage assessments – Rio Tinto cultural heritage assessment and surveys can identify objects or places of value as well as establish the cultural context in which heritage is valued.

The Rio Tinto Communities standard also requires all of our businesses to address, as part of their community engagement, changes that occur in local cultural norms, whether these are a result of our operations or not. This means that while we are responsible for understanding and managing changes due to our presence, we also need to understand how these relate to other cultural changes. These can be monitored by periodically checking with communities and by carrying out cultural heritage studies.

The studies and their terms of reference should be broad enough to ensure they meet the requirements of the Communities standard to:

- compile a list of tangible cultural heritage features based on relevant cultural norms;
- develop an understanding of intangible cultural values; and
- document all industrial and historical heritage features and values of the operation itself.

Analysis of this information by cultural heritage experts, whether internal or external, creates an understanding of how places, objects and practices are valued, how they may be impacted by operational activities, both positively and negatively, and how impacts can best be managed. Each operation also needs to carefully consider how data will be handled in the cultural heritage management system and how it will be used to inform the operation’s management.

Cultural heritage information should be collected throughout the lifecycle of a mining or processing operation. This is because different stages in the life of the operation can have different impacts on cultural heritage (see the Background reader for more information). It is also because the long life span of operational activities, and associated infrastructure, means that individuals in affected communities will change, as may their understanding and perception of risk and impact to cultural heritage.

2.2.2 Understand cultural heritage risks

Risk analysis, including threats and opportunities, helps determine the scale and complexity of the cultural heritage management system required to adequately cover the operation's risk profile. Cultural heritage risks should be assessed as part of an operation's Social Risk Analysis (see Social risk analysis guidance), and in some situations specific cultural heritage risk analyses are warranted.

Understanding risk exposure provides a better understanding of how to design and implement a cultural heritage management system that is appropriate to the level of risk. Factors that contribute to risk exposure include:

- the pattern of the region's cultural heritage sites (types, distribution and density) and the absence or extent and quality of previous heritage surveys;
- the nature of the community's/ region's intangible cultural heritage and values, and its likely sensitivity to impacts from mining;
- recorded heritage sites in the area of operation and the significance of these sites;
- any land claims or land ownership issues relating to the operation's land, and whether any community agreements are in place;
- the extent of any existing statutory and project approvals or cultural heritage management plans, including ones for cultural heritage disturbance;
- the priorities, concerns and willingness to engage of relevant communities;
- past disputes or legacy issues; and
- the nature of the operation's activities.

People's perception of risk is context dependent. In an area where industrial development is new, or in which cultural heritage is impacted cumulatively by many operations or activities, people may feel the impact of new activities more strongly, regardless of the impact's intensity. This is another reason why regular updating of our baseline data is required.



Left
This sacred tree is located next to the ruins of the ancient Alag Bayan temple in the Bayan bag, Khanbogd soum, Mongolia. It is the largest elm tree (6m in diameter) found in Mongolia. The local community protects the tree, including not moving wood or fallen branches of the tree and prohibiting polluting and littering. This photo was taken by Oyu Tolgoi botanist, J. Sanjid, in July 2009 to record this cultural heritage feature.

2.2.3 Undertake cultural heritage assessments

A cultural heritage baseline assessment should consist of:

- a desktop review, followed by ground survey work addressing all relevant forms of heritage;
- inclusive engagement and consultation with local communities and stakeholders; and
- an analysis of the legal framework applying to the operation.

Desktop review

A desktop review consists of a review of:

- existing knowledge held by the operation (operation's records, reports, employees knowledge etc);
- heritage registers (local, regional, national and international); and
- academic studies that might have been conducted in the area including archaeological, historical, anthropological and palaeontological studies.

Reviewing our knowledge base is particularly important if an operation has been active for many years or has not previously carried out heritage work in a formal and systematic way. Cultural heritage work can be done retrospectively; especially if an operation began before

systematic cultural heritage management was legislated or required by Rio Tinto. It may be useful to seek out reports of early work such as the initial exploration of the area, which may have documented an early cultural consultation or environmental scan of the area.

Heritage registers list cultural heritage sites at various levels of significance. The value assigned to a cultural heritage site will define whether it appears on local, state, national or international heritage registers and, consequently, the regulations which apply to it. Not identifying already-registered sites or misunderstanding the management requirements or limitations imposed by a site's registration can result in serious consequences, such as legal breaches or claims of unauthorised access.

A register check is just the starting point of cultural heritage work. Relying solely on registers to inform cultural heritage work is insufficient because it is rare that all sites will be registered. Legislation often provides blanket protection for categories of sites irrespective of registration. Ignorance is no defence if these sites are disturbed.

Survey work

Surveys of cultural heritage sites usually involve technical experts assessing the features of either all land managed by the operation or the proposed footprint of specific development projects. This may include, but is not limited to, new mining areas or processing facilities, infrastructure such as roads, railways, power stations and lines, hydro-electric dams, tailings, and exploration tracks and drill pads, or areas potentially affected by emissions or dust. Extensions to existing works should also be assessed. The time and cost involved in survey work is scale and context-dependent.

There are many possible approaches to site survey work. The methodology chosen will affect the outcome of the survey, as will the professionals who carry out the survey. Professionals should be selected based on recognised competence. Expert advice from within the company can be sought to ensure that the right expertise and methodology are used to enable the comprehensive and accurate identification of cultural heritage values.

Most heritage assessments involve both an ethnographic survey conducted by an anthropologist and an archaeological survey conducted by an archaeologist. A specific historical-archaeological survey may also be required where there are potentially historic remains, including old buildings or mine workings. Palaeontological surveys may be required in areas containing fossil remains.

- Ethnographic surveys are used to identify places and practices of significance, some of which may be invisible to people outside of the cultural group concerned, and possible impacts to them. Ethnographic surveys are conducted by a qualified anthropologist.
- Archaeological surveys should aim to locate and record all archaeological sites likely to be affected by the proposed project works. A comprehensive survey is necessary when little is known about the distribution of archaeological heritage. Where substantial baseline data are available, a sampling survey may be appropriate, provided it is rigorously justified.
- A historical survey may be required where it is likely there are historic buildings or other remains. Historical archaeologists are trained in identifying subtle landscape evidence such as property boundaries and historic evidence that would not normally be detected in archaeological or ethnographic surveys.

- Industrial heritage can be identified in a historical survey and where relevant should include an assessment of Rio Tinto's own business assets.
- Palaeontological surveys are conducted in areas likely to contain dinosaur or other prehistoric, non-human fossils.

Technical experts should be accompanied by community members, especially those for whom the cultural heritage is important, who can assist in the identification of features and more importantly explain the significance of these features. The involvement of local groups or traditional land owners in both ethnographic and archaeological surveys can:

- contribute to cultural maintenance;
- foster cultural education and help to ensure there are community members with cultural heritage knowledge for future assessment processes; and
- foster a spirit of inclusivity and engagement.

Sometimes communities include or employ their own technical experts and can conduct the required survey work. In Australia, Canada and the US, for example, representative indigenous organisations often coordinate indigenous heritage assessments, especially if this is required by an agreement between the operation and the community.

The completion of survey work does not mean that all heritage features or values have necessarily been identified. Sub-surface prehistoric human remains for example may only be uncovered during ground disturbance works or other activities. If you come across a cultural heritage feature that was not previously known about, it is called a 'chance find'. Procedures to deal with chance finds should be developed and implemented so all employees and contractors stop work at once on discovery of new objects until the work is cleared through the relevant process. Chance finds procedures are discussed in more detail in the Plan and Implement section of this guide (2.3).

Case study 2 from Jadar, Serbia, highlights the importance of an early stage desktop review and initial survey work to ensure a thorough awareness of the cultural heritage issues of the region during project studies and design.



Above
Rio Tinto Alcan Weipa employees
examining a historic drill rig on ML7031,
in Queensland, Australia. This artefact
is now protected by a fire break and a
controlled burning programme to reduce
the impact of bushfires on the wooden
frame. (L-R) Neale Dahl, Environment
superintendent, and Justin Shiner,
Specialist archaeologist.

Left
Ken Mulvaney, Cultural Heritage specialist
at Rio Tinto Iron Ore, and students from
the University of Western Australia record
rock art on the Burrup Peninsula, Pilbara
Region, Western Australia.





Jadar
Serbia

Case Study 2: Rio Tinto in Jadar, Serbia

Involving experts in early desktop review for identifying cultural heritage

Rio Tinto's lithium-borate project in Jadar is located approximately 100 kilometres from Belgrade in Serbia. Discovered by Rio Tinto Exploration, the Jadar project transferred to Rio Tinto Minerals in 2009 after an Order of Magnitude study was completed. There was significant cultural heritage work undertaken at the Order of Magnitude phase.

Challenge: Involving cultural heritage early

The challenge for Rio Tinto Exploration (Exploration) was to develop a sufficient understanding of the cultural heritage of the area before drilling began, at a scale and cost appropriate to the project's early life stage and low levels of disturbance. Exploration followed the principle that it is best to gather quality cultural heritage information upfront and ensure heritage management requirements are incorporated into project planning and design. This will help to avoid possible mistakes and prevent any large effort or cost to the business from avoidable project redesign or heritage mitigation. By involving the right heritage experts in its early stage heritage work, Exploration was able to identify and avoid significant heritage places and values, and understand the relevant threats and opportunities for subsequent project phases. This has also led to strong relationships for the future project studies.

Process: Conduct early desktop review

Exploration undertook a desktop review of the Jadar site, involving regional experts from the University of Belgrade. This consisted of an in-depth literature review, a site inspection and the building of a digital database, integrated with GIS, for easy future use. This process helped to compile information about the history and significance, past and present, of the site.

The findings of the desktop review revealed very broad and significant heritage values including the existence of Bronze and Iron Age tombs in the area of Brezjak village. These contained cremated human remains, bracelets, necklaces, spears, urns and other artefacts. This early research helped inform cultural heritage management requirements for future project phases and will prevent any unnecessary disturbances to cultural heritage during the construction and operation of the mine.

As well as possessing tangible artefacts dating from the late

Neolithic Age all the way through the Middle Ages, the Jadar area also possesses significant intangible value owing to the area's historical involvement in World War I. The Battle of Cer, also known as the Battle of Jadar, took place between the Serbian and invading Austro-Hungarian armies in this area. The battle was the first allied victory in World War I. This historic memory from the war, along with physical archaeological assets from the time, is an important aspect of the local community's collective memory.

Continued study of the tombs in particular is likely to provide deeper insights, which have long been lacking, about the people who occupied the site several thousand years ago. In November 2010, Rio Tinto signed an agreement to donate €50,000 to the Jadar Museum to continue research into these prehistoric burial mounds. Once exploration is complete, Rio Tinto will work with the museum to develop plans on how to best interpret and exhibit their discoveries.



Outcome: Early heritage work leads to success later

By conducting the desktop review early in the project as part of its heritage work, Exploration revealed significant archaeological sites, drew attention to an important time in history for the local people, and identified areas of sensitivity, such as the unearthing of mortal remains from WWI. Rio Tinto Minerals need to remain cognisant of these findings in their work.

These findings demonstrate the importance of addressing cultural heritage issues upfront,

even though the evolution of a mining project can take 10 or 20 years. By involving the right local experts this was achieved at a cost proportionate to the project phase. With a thorough knowledge of the Jadar area's cultural heritage, Rio Tinto Minerals is also now well placed to support and strengthen the area's on-going heritage management. Early engagement around cultural issues and involvement of local experts is also recognised as crucial for building strong community relationships and partnerships.



Top
A school group visiting the battle of Cer Memorial House. The Battle of Cer, which was the first allied victory in World War 1, is an important aspect of the local community's collective memory.

Bottom
Site reclamation after excavation of Bronze and Iron Age tombs at the Jadar project.

Circle
Excavation of Bronze and Iron Age tombs at the Jadar project.



Survey reports

Reports from survey work should be comprehensive and ensure that all necessary information is captured and is consistent with our internal information management system. We aim to maintain consistency in our heritage reports to ensure that unauthorised cultural heritage impacts do not occur as a result of inaccurate information.

The operation should ensure it obtains appropriate authorisation from the community to use any cultural information which has been obtained for business purposes. This helps individuals and communities to retain their moral and intellectual property rights in relation to cultural knowledge. Communities have the right to decide how cultural information is to be communicated publicly and are entitled to restrict the wider sharing of their cultural knowledge.

Each operation should have a clear and appropriate information management system that ensures that cultural heritage knowledge is handled with sensitivity and respect. For instance, restricted documents should be clearly marked.

Legal framework

A cultural heritage baseline is required to establish the legal framework within which cultural heritage management operates, at the international, national and local scale. This legal framework may include customary laws (based on local cultural traditions), regional and national cultural heritage laws, and international charters, conventions and other agreements applying to the country of operation. These instruments have varying degrees of legal status. Cultural heritage legislation often differs between and within countries, depending on the level of significance attributed to a cultural heritage place.

In certain circumstances there may be different laws and regulations to protect the cultural heritage of different groups within the same jurisdiction. Sometimes, legislation covering areas such as the environment, mining or land rights may link to and reinforce cultural heritage requirements.

Rio Tinto businesses also have to comply with industry protocols and standards for cultural heritage as well as for sustainable development and environmental and social responsibility. While there may be no legal sanctions, Rio Tinto's reputation can suffer if we do not rigorously observe them.

In some cases, local legislation requires a third party to carry out cultural heritage survey work or will have stipulations regarding the ownership, and subsequent handing over, of excavated artefacts. In many countries the State owns heritage features. This should not prevent Rio Tinto businesses from employing their own cultural heritage practitioners to ensure that cultural heritage work is of a high standard and meets our own requirements.

If there is no legal framework for the protection of cultural heritage in a country where Rio Tinto operates, or if our standards exceed the legal requirements, then the operation should meet Rio Tinto standards.

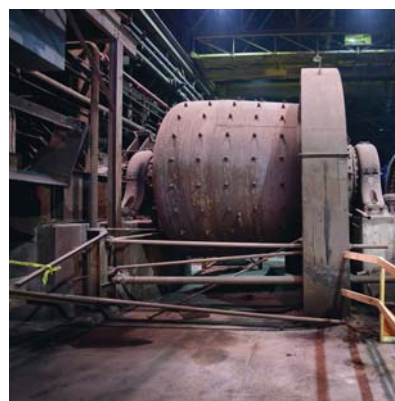
Case study 3 (page 38) on Palabora mine in South Africa describes a unique requirement for businesses operating in this region. Palabora has succeeded in not only complying with the South African legislative requirement to keep a heritage register, but took a step further and turned their register into an asset.



Heritage assets

In some circumstances the cultural heritage baseline assessment should also recognise and record the historical importance of the mining operation itself. Historical and/or industrial heritage professionals can assess the significance of historical buildings, landscape features or machinery which may reflect their period architecture, illustration of a point in the nation's history or any other element of historical or technological importance. Circumstances where this would be relevant include: where the business's assets are over 50 years old; where they represent the first example of a technology or building type; or where the operation played a significant role in the development of a region or nation.

Historic mining operations often have a special place in the collective memory of the local community as generations of people have worked in the mine or the industry. Sometimes the history of a mining operation or a commodity will be intimately linked to the history of regional development in the area. For example, case study 4 (page 40) on the Shawinigan Aluminium Smelter in Canada highlights some of the reasons why historical buildings owned by an operation may be significant heritage features themselves and how these features can be managed in a way that enhances their value through contemporary use.



Top
Mining cottages are a valued heritage asset in Michigan, US.

Above
Interior of the Humbolt mill, which will be refurbished to process ore from Kennecott's Eagle mine in Michigan, US.



Phalaborwa
South Africa

Case study 3: Rio Tinto in Phalaborwa, South Africa

Addressing legal requirements while furthering cultural heritage goals

The Palabora Mining Company (Palabora) operates a large copper mine in the Limpopo province of South Africa. Palabora, which began operations in 1956, is wholly managed by Rio Tinto, who own 57 per cent of the mine. It is South Africa's sole producer of refined copper.

Challenge: Working with legal requirements to benefit cultural heritage

South Africa has made several legislative reforms to address the management and protection of its rich heritage sites and resources. Specifically, the Palabora mine is required to compile an inventory or heritage register for the area where it operates (Section 39 of the *National Heritage Resource Act*). The challenge for Palabora has been to meet these legal requirements while simultaneously developing a publicly available heritage register for the site. Though legislative requirements were the impetus for Palabora to develop a register, it was also created as a tool to effectively manage future activities and make timely planning decisions, and to demonstrate to both the local communities and government that their cultural heritage was being managed effectively.

Process: Construct a register

Palabora mine operates in the Phalaborwa region, an area rich in cultural heritage resources dating back as far as the Stone Age. In total, 13 archaeological sites have been found on the mine lease area owned by Palabora. Two of these, Shankare and Phutwane, are considered to be of outstanding historical significance for their evidence of early human settlement.

Despite some general guidelines listed in the legislation, no regular format was available to shape Palabora's cultural heritage register. Considerable time was therefore spent planning the design and content of the register. An internal team at Palabora was commissioned to work on this and a cultural heritage expert from Rio Tinto Corporate was consulted in this planning phase. The design and content of the register took into account the political situation – the mine area is subject to

land claims by four different communities. The cultural heritage belonging to each of these groups needed to be represented diplomatically in the online content.

Today the Palabora cultural heritage register consists of a website³ maintaining records of all cultural heritage resources, sites, artefacts and related activities, in accordance with the legislation. The register provides pictures and useful details such as description of threats, which communities lay claim to the sites, who is in charge of monitoring and much more. Beyond the required content, the online register also contains a descriptive history of the area and the legislation applied there, two interactive GIS maps, and contact information for further suggestions and comments. Mine site access restrictions, including mine security, ensures that listing of the site data does not present a risk of unauthorised visitation, damage or looting to these sites.



Outcome: Going beyond compliance

Using the South African legislation as a stepping stone rather than an end goal, Palabora has taken the opportunity to make their cultural heritage register a robust and interactive tool available online to the public. The register has contributed to community pride in the four different communities with competing land claims but has not increased political tension between them. Besides being a comprehensive record of the existing conditions, the register also ensures that future mining and development activities are sensitive to these heritage sites, preventing future loss and damage. By taking a proactive approach in composing this type of register, Palabora demonstrates how a business can comply with legislation and meet its internal cultural heritage management requirements, as well as further its commitments to transparency, community respect and public education.

3



Top
University students from Cape Town University conducting an excavation at one of the archaeological sites on the Palabora lease.

Above
Members of a local Tribal community visiting a natural spring that was used by their ancestors. The spring is located on the Palabora lease.

Circle
Remains of a copper furnace located at Palabora during development.



 Quebec

 Canada

Case study 4: Rio Tinto in Quebec, Canada

Recognising the heritage value of Canada's aluminium industry

The first aluminium ever cast in Canada was in 1901 at the Shawinigan Aluminium Smelting Complex in the city of Shawinigan in Quebec province. The Shawinigan Aluminium Smelting Complex, which was then operated by the Northern Aluminum Company Limited has since become part of Rio Tinto Alcan. In view of this century long history, the former Shawinigan Aluminium Smelting Complex, the oldest existing aluminium smelting complex in North America, was designated a 'national historic site' of Canada in 2002.

Challenge: How to protect industrial heritage values

The Shawinigan complex represents the historic birth and development of aluminium production. The key heritage values of this historic site include its architecture and construction, the views from the various buildings and the relationship of the buildings to the Saint-Maurice River and Shawinigan Falls. These values and attributes are all listed in Canada's Register of Historic Places. The challenge for the company was not in trying to evaluate the heritage values of the complex, which were well understood and recognised, but in finding an effective way to manage these values once the buildings were no longer being used for aluminium production.

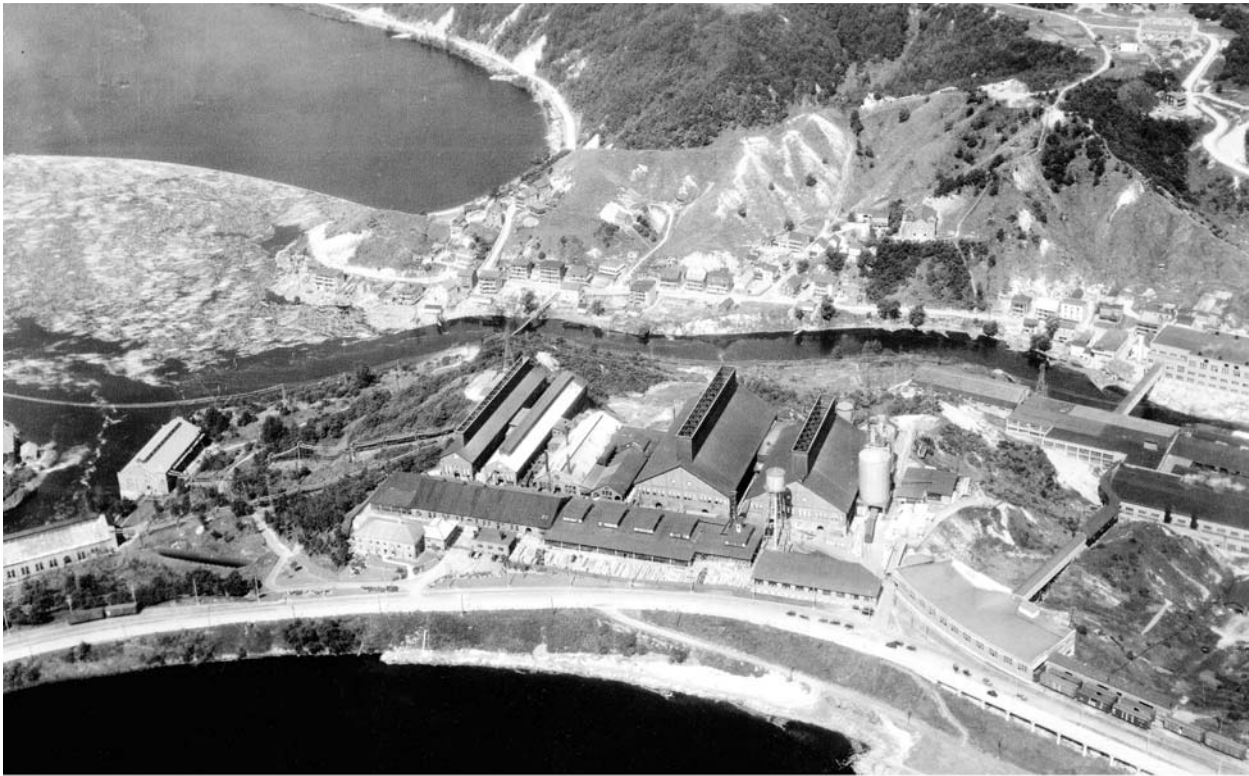
Process: Recognise and celebrate the values

The company decided the best way to protect and promote the heritage values was to donate the buildings from the Shawinigan Aluminium Smelting Complex to *La Cité de l'énergie* (the City of Energy), a theme park, which celebrates the influential role of Canada's aluminium industry. The buildings were donated in 2001, along with \$1.4 million, as part of celebrations marking the centenary of the first aluminium casting in Canada.

The Shawinigan Aluminium Smelting Complex, now known as Espace Shawinigan (Shawinigan Space), has since been converted into a contemporary arts centre and makes up a significant part of *La Cité de l'énergie*. The park consists of a science centre containing interactive displays, an observation tower, as well as a historical sector with various historic buildings and their industrial contents, which are open to the public. Nowadays, *La Cité de l'énergie* is one of Quebec's leading tourist attractions. This management outcome preserves

the unique history of the complex while allowing it to be used and appreciated by the wider community.

Rio Tinto Alcan remains involved in the management of Espace Shawinigan by having members on *La Cité de l'énergie's* administration committee. Every year Rio Tinto Alcan also collaborates with *La Cité de l'énergie* to help stage an art exhibition in the restored brick and steel buildings, using the historic buildings as a site for contemporary cultural and artistic expression.



Outcome: Honour the past, while operating in the present

As with the conservation of all historic buildings, finding a new use for them is the best way to ensure the buildings, and in this case, the industrial heritage values they represent are preserved. Recognising the cultural heritage values of the buildings and their history was the critical trigger for all that followed. Through this donation and ongoing involvement, Rio Tinto Alcan continues to contribute to the cultural atmosphere of Shawinigan. Recognising and contributing to the role that the aluminium industry has had on regional development, community identity, and more recently, to the arts, Rio Tinto Alcan continues to foster the historic intersection between industry and community in Shawinigan.

4



Top and above (left and right)
For 25 years, the Shawinigan aluminum smelter was one of the largest in North America. When these pictures were taken, in the 1920s, the aluminum complex, located near Shawinigan Bay and the Belgo plant, comprised two power substations, four potrooms, one cable factory, and one wire drawing unit, among others.

Circle
In the early 20th Century, smelter employees had to have strength and endurance as they handled the heavy metal bars used to remove the aluminum from the pots. They wore wool clothing as protection against the molten metal.

Left
La Cité de l'énergie is now one of Quebec's leading tourist attractions. It preserves the unique history of the complex while making it available to the wider community.

2.2.4 Cultural heritage management – drawing on the knowledge base

The knowledge base yields important information for the successful management of cultural heritage. Cultural heritage significance assessments and impact assessments are the basis for choosing the best management options.

Significance assessment

Significance assessment is a formal process for understanding the value of cultural heritage. Significance assessment, and the values that are defined through the process, should determine management decisions. It is undertaken by heritage experts in consultation with community members and will be based on the analysis of oral, documentary and physical evidence, to draw out the social, aesthetic, historic and/or scientific values of the place, object or practice.

If adequate assessment is not undertaken, it is possible that management decisions will be made that inadvertently destroy or diminish important aspects of the cultural heritage feature's significance or that favour one stakeholder's values over another's, resulting in conflict (see the Background reader for more information).

Box 4 explores the possibility of disputes arising during significance assessment and their potential for resolution. Disputes can occur if significance assessments and subsequent management options defined by heritage experts and/or other stakeholders are not considered adequate by the community. Conflicts can also arise between various community groups.

While it is always important to consider the community's values, community consultation is not an excuse for ignoring the advice of qualified professionals who may recommend more stringent heritage management than the community does itself. Some mining companies have been criticised by heritage professionals and NGOs for excluding experts from the assessment process because they are aware that local communities have a limited understanding of the scientific value of some sites and are, therefore, more likely to approve proposed works.

4. Dealing with disputes

There may be considerable discrepancies in the values that different groups associate with the same place, object or practice. In instances when an agreement cannot be reached, external cultural heritage experts may be consulted to assess the validity of claims of each group. This is difficult because the Rio Tinto Communities standard requires an accommodation of the different cultures, lifestyles, heritage and preferences of the local communities in which we operate. Our role is not to deny the cultural significance of a place, object or practice or to resolve local differences over it but rather to ensure that we respect each group's concerns. Community groups may be more willing to engage in a variety of management activities if they feel that they have been heard and respected.

Impact assessment

Once a place, object or practice has been assessed as 'significant', then the appropriateness of all future operational activities need to be measured according to the degree of impact they will have on this significance. Impacts need to be clearly spelled out so that management measures can be clearly identified. Box 5 outlines the potential for cumulative cultural heritage impacts.

For cultural heritage, an impact assessment looks at changes to both tangible and intangible cultural heritage likely to be caused by our operational activities. Impacts of these activities can range from minor disturbance of a low significance archaeological site to the destruction of an entire cultural landscape. Changes caused by our operational activities can be analysed for threats to and opportunities for communities and the business and link them to proposed risk mitigation strategies. In short, impact assessment allows us to understand how the project or operational plan may affect local cultural heritage matters, however complex.

Projects requiring the resettlement of a whole community for example, could lead to significant impacts on both tangible and intangible heritage values. In such cases the assessment involves identifying specific cultural impacts likely to result from relocation – such as relocating the custodians of a sacred site away from that site, which may limit their

ongoing access and therefore restrict the continuation of their cultural practice. Oral histories, photographs, film, facsimiles and other forms of documentation and community museums may be necessary to preserve something of what is lost and wherever possible to enable continuity of traditions.

The establishment of hydro-electric dams can be another high impact area. In these cases, there may be a much greater and longer term demand for a business's resources for studies and experts to address these impacts. This could include protection and mitigation measures, as well as compensation for permanent cultural loss and, in certain cases, the performance of rituals that may need to be repeated well into the future.

International good practice requires that cultural heritage, including biophysical and social features, be captured in environmental impact assessments. Rio Tinto's requirements are even more stringent, requiring that a specific cultural heritage baseline assessment be conducted as part of a new project's social and environmental impact assessment process. A procedure for conducting cultural heritage assessments should be developed and incorporated into the cultural heritage management system, especially where the business is likely to have an expanding footprint and require more than a single survey and assessment.

5. Cumulative impacts

In areas where there is a lot of other mining activity or the impacts of mining development are compounded by other forms of development, then the cumulative impact of these activities will also influence management requirements. What may be perceived by employees as a relatively small loss of cultural heritage – for example, the destruction of an archaeological site that is deemed to have little historical or social significance – may be valued highly by the descendent community if they have experienced significant loss of other sites or change in their cultural heritage from mining or other developments in the area.

2.3 Plan and implement

Good cultural heritage management requires careful planning to ensure it is smoothly integrated into our operational plans and procedures.

Cultural heritage considerations need to be incorporated into project planning and design from the outset. Cultural heritage planning should take place in several key areas:

- at the strategic level as laid out in the businesses multi-year Communities plan;
- as a key component of project study and design;
- during the development of procedures and systems; and
- at the programme level for the design of specific community initiatives.

A CHMS incorporates all four phases of cultural heritage management covered in this guide, each of which requires the development and implementation of clear cultural heritage management procedures, systems and/or plans. Cultural heritage considerations should also be integrated into all operational policies, plans and activities that have either direct or indirect cultural heritage implications. The CHMS should have an established decision-making hierarchy with clear lines of accountability.

A CHMS will include specific cultural heritage management plans, and these are often required as components of an operation's social and environmental impact assessment. Cultural heritage agreements with communities and other stakeholders may also be needed in some contexts.

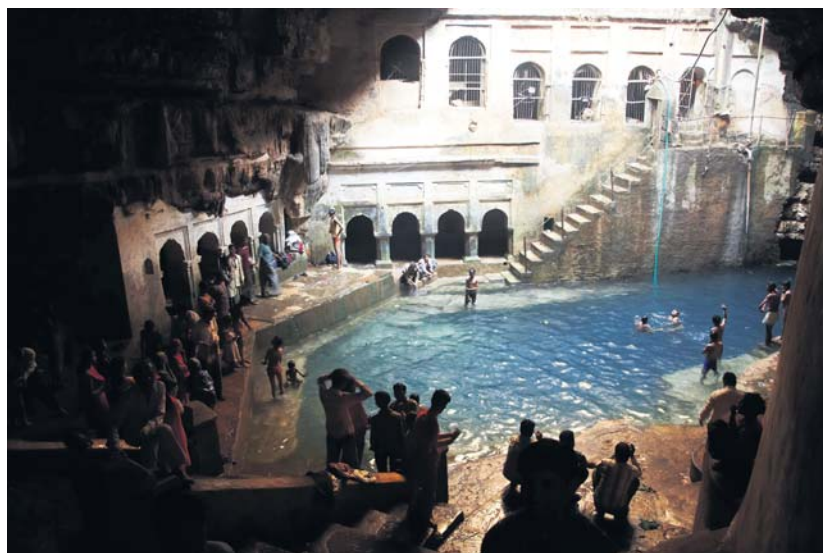
Checklist

- | | |
|-----|---|
| [✓] | Is the Cultural Heritage Management System (CHMS) integrated into operational planning processes and authorisation procedures to ensure all work is compatible with the CHMS? |
| [✓] | Are all potential users of the operation's CHMS trained in its requirements? This includes anyone with authority to undertake new ground disturbing activities (eg: mine and project planners, geologists etc). |
| [✓] | Is there a clear procedure for the identification, evaluation and management of the operation's cultural heritage? |
| [✓] | Are cultural heritage management arrangements formalised in a cultural heritage management plan which details the specific management measures to be implemented for the area under consideration? |
| [✓] | Is cultural heritage work integrated into other functions such as Human Resources and Environment? |
| [✓] | Is there a cultural heritage zoning plan or are cultural heritage considerations incorporated into the operation's ground disturbance permit system? |
| [✓] | Do employee inductions include an overview of cultural heritage of the area and the operation's cultural heritage policy, commitments and procedures? |
| [✓] | Is the CHMS integrated with the operation's communities systems and programmes? |
| [✓] | Is cultural heritage integrated into the operation's closure management plan so that current cultural heritage management measures are either continued or divested after closure, additional protective measures are considered, and cultural heritage documentation or cultural materials (either salvaged or gifted) are considered? |
| [✓] | Are there strategies in place at the workplace to educate employees about local cultural beliefs and practices? |
| [✓] | Does the cultural heritage management system conform to Rio Tinto Group guidance? |



Above
A local woman intricately and delicately weaves a basket out of strips of bamboo in Bajna village, near Rio Tinto Diamonds' Bunder camp, Madhya Pradesh, India. Most local communities in this area make their livings from farming or traditional handicrafts such as this.

Right
Bheemkund is an underground perennial pool which is a significant religious site in Madhya Pradesh, India. During religious pilgrimage hundreds come to bathe in and drink from this pool as a sign of allegiance and dedication to the Gods. Bheemkund is 15 kilometres from the Bunder camp and will not be affected by the development of the mine.



2.3.1 Cultural heritage management plans

Cultural heritage management plans (CHMP) set out the management issues relating to a specific area, or heritage place, object or practice. A CHMP is often a legally-binding document which sets out the accountabilities of signed parties.

The content of a CHMP will differ depending on its scope, the existence of heritage values in the area, the heritage work done to date and other factors. A CHMP may be two or 200 pages long, proportionate to the level of cultural heritage complexity. In some areas and jurisdictions, legislated or formal guidelines may influence or determine the content of a CHMP.

In general, a CHMP will:

- outline the history, contemporary profile and aspirations of the relevant community;
- outline the cultural heritage characteristics and values of the area;
- identify important management issues, objectives and priorities including co-management aims and community perspectives;
- set out the planning background that has influenced consultations and management decisions;
- set out the proposed governance and management arrangements for the area or feature, including accountabilities of all parties;
- identify monitoring and reporting objectives; and
- outline a complaints, disputes and grievance procedure.

Box 6 provides an example of a comprehensive management plan for an area, which pulls together all the applicable elements of the business CHMS. CHMP for a specific cultural heritage place, object or practice would include the relevant elements of these.

6. CHMP – example contents

1. Introduction
 - a. Context and setting
 - b. Applicable laws and standards
 - c. Definitions
2. Scope and structure
 - a. Heritage values
 - b. Nature of the operation and potential impacts
 - c. Cultural heritage management objectives
3. Responsibilities
 - a. Operational accountabilities
 - b. Employee induction and training
 - c. Contractor management
4. Roles of the parties
 - a. Rio Tinto operation
 - b. Local community(s)
 - c. Other parties
5. Disclosure of information
6. Consultation procedure
7. Management of cultural heritage
 - a. Procedure for conservation of cultural heritage
 - b. Procedure for removal of cultural heritage
 - c. Procedure for chance finds
 - d. Procedure for implementation of cultural programmes
 - e. Procedure for use of cultural heritage (by community/by business)
8. Cultural offset
 - a. Identifying and managing offsets
9. Complaints, disputes and grievance procedure
10. Incident reporting
11. Monitoring and evaluation
12. Management schedule

A CHMP often has monitoring and reporting requirements that can be used to review its effectiveness. These may include tracking performance, verifying compliance in consultation with all parties and making recommendations.

Cultural heritage management plans should also take into account how the operation may affect a neighbouring community's intangible and tangible heritage both economically and physically, and contain guidelines for managing these impacts across the life of mine. For example, they can include programmes designed to maintain or preserve a local tradition or intangible cultural value or compensate in a different way for damage caused to a site. The CHMP should state clearly who is accountable.

All parties and their roles and responsibilities should be defined in the CHMP. This includes the operation's responsibilities to train and induct all employees in cultural heritage matters in order to avoid damage to both tangible and intangible heritage due to lack of awareness. There should also be a clear procedure for managing potential impacts from contractors and visitors. Other agencies such as governments and museums may also have responsibilities that need to be clearly articulated in the plan.

All operations should have a 'chance finds' procedure which sets out what is to be done when cultural heritage objects are unexpectedly uncovered during operational activities. In particular this procedure should specify the steps to be taken if human remains are found, as these may constitute a crime scene or may be of high cultural sensitivity and need to be treated with particular care. Operations should also plan for unforeseen discoveries of intangible heritage and set out the correct procedure for dealing with them. These plans should be established from the start of a project. Box 7 outlines likely steps.

7. 'Chance finds' or 'unforeseen discoveries' procedures

1. Stop work in the vicinity of the find at once (very often work can be continued at another part of the project, so avoiding costly delays).
2. Notify the accountable operations manager or relevant Rio Tinto authority. The find should be treated as a cultural heritage incident and reported.
3. Notify police if human remains have been found: various legal requirements are likely to be triggered.
4. Notify cultural heritage authorities, if required, in the case of any archaeological or palaeontological find.
5. Use heritage experts and relevant community members to assess the significance of the find, and report it if required by law.
6. Decide on the right way to manage the find in consultation with the relevant community groups and stakeholders. Resume work if permitted and agreed.

2.3.2 Implementing management actions

Cultural heritage management actions may encompass active documentation, conservation and enhancement, recording and destroying or relocating cultural material. Sometimes management is specific to a small area and at other times it will need to be conducted on a larger scale to retain the overall cultural values of a landscape. Planning and decision making weighs the values of the heritage place or object against a range of other opportunities and constraints and should be based on:

- the value of the cultural heritage to all stakeholders;
- outcomes of the business risk assessment process;
- the cultural norms and wishes of the community;

- the operation's characteristics;
- specialist cultural heritage advice;
- other stakeholder concerns; and
- legislative requirements.

To ensure inclusive engagement cultural heritage projects should be co-managed in partnership with relevant communities.

Specific activities which communities may participate in include:

- cultural heritage management decision-making processes;
- defining and continually monitoring the cultural values of the area defined as co-managed;
- providing advice and direction on and participating in environmental monitoring;

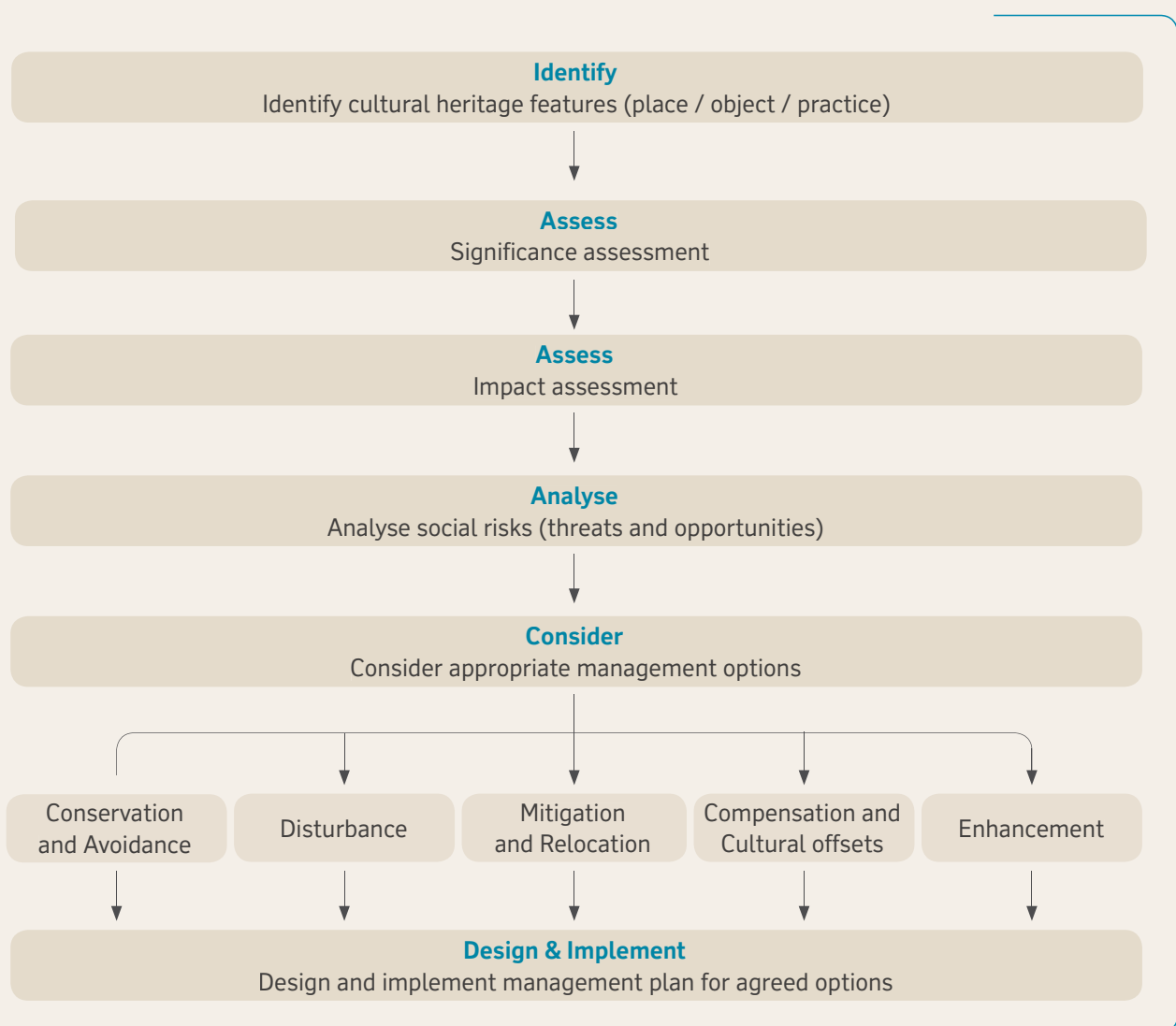
- providing advice, direction and facilitation of cultural inductions and training of employees and contractors;
- implementing programmes to manage cultural heritage sites, or to mitigate any harm or loss caused to a site;
- implementing intangible heritage documentation (eg: oral history collection);
- co-ordinating cultural programmes (eg: dance, theatre, music, story-telling, knowledge sharing); and
- encouraging trainees in cultural heritage and environmental monitoring.

The process for identifying and establishing appropriate cultural heritage management options is outlined in figure 2.



Left
Aboriginal artists from the Pilbara region at the opening of the "Colours of My Country" exhibition in Perth, Western Australia, 2010. The exhibition is supported by Rio Tinto Iron Ore. (L-R) Tootsie Daniels, Loreen Samson, Kenny Diamond, Kaye Warrie, Judith Coppin.

Figure 2. Process for developing a Cultural Heritage Management Plan (CHMP)



Developed by CSRM, May 2011

Avoidance and conservation

Project design should be modified wherever reasonable and practicable to take account of concerns raised by communities and relevant stakeholders and the results of significance and impact assessments. It is possible that in some cases the only acceptable management option for a cultural heritage feature is not to disturb it. If no other suitable management option can be agreed upon then consideration must be given to redesigning or relocating relevant aspects of the project.

Protecting the cultural significance of a place does not always, or only, require that the place be avoided (although avoidance may be a part of its management). More often the site is recommended for conservation. This can include all the processes of looking after a cultural place or object so as to retain its significance. If a place's physical appearance is critical to its significance, then this should be retained. It is often important to use traditional methods of conservation to retain the cultural significance of a site, especially if modern techniques and materials are seen to erode the significance or perpetuate the loss of traditional laws, methods of conservation or traditional authority to care for cultural heritage.

Retaining the significance of a cultural place or object may include:

- protective management and restricted access zoning;
- maintenance, preservation, restoration, reconstruction or adaptation of the cultural heritage;
- documentation and recording;
- formal management buffers;
- signage, barricading and/or fencing;
- bunding, drainage and/or vegetation management;
- fire and pest management;
- site monitoring;
- rehabilitation or reconstruction of the pre-mining landscape; and
- employee and contractor inductions, education and training.

Sometimes, to retain the cultural significance of a place, it may need to be continually used by the people for whom it holds significance. This may be as true for a historic religious structure as for a cultural landscape. Planning for continued access and use of the site may need to be carefully factored into operational procedures, including, but not limited to, health and safety requirements for visitors entering operational areas. This can be addressed by developing agreed access protocols with the relevant individuals or community(s).

Disturbance

Sometimes disturbance of tangible cultural heritage is unavoidable or is considered a legitimate option after careful consultation on the value of the place or object has taken place. Occasionally specific areas may be avoided but the larger cultural landscape may still be impacted.

An operation should have a disturbance approval procedure that defines protocols for:

- seeking disturbance approval from relevant communities and the statutory authority for cultural heritage disturbance;
- agreeing upon compensation for the damage where appropriate;
- documenting and recording the cultural heritage before disturbance; and
- ensuring that operational work procedures align with the disturbance procedure.

At Rio Tinto operations with a mature CHMS, disturbance approvals are organised well in advance of the operational plan to allow for the appropriate CHMS processes to be undertaken and to avoid delays in approval that affect operational time lines (see case study 8, page 64).

Mitigation and relocation

In instances where disturbance of tangible cultural heritage is approved, steps must still be taken to reduce the impact of the loss. This may include recovery of as much information or material as possible before the feature is destroyed. These options are often referred to by Rio Tinto as mitigation options.

Mitigation may include one or more of the following measures:

- surface salvage collection of cultural heritage artefacts;
- sub-surface salvage excavation of cultural heritage artefacts;
- sub-surface investigation and recording of archaeological deposits;
- archival documentation of places and objects;
- relocation or recovery of significant cultural heritage objects/places; and
- ethnographic studies.

Relocation is a mitigation option that is commonly requested by community members, yet it can significantly affect archaeological or other heritage values and this impact is not always understood by community members.

Heritage values are often integrally connected to the place/context and removal of the heritage feature from its original context can destroy that connection. Preservation in-situ is therefore the best practice for site protection. Given the potential for impact, relocation should only be considered as an option after advice from cultural heritage experts and only if relocating the site or object it is seen to preserve its heritage values. Where this is not possible other forms of mitigation should be undertaken. In planning for relocation it is important to consult with community members as well as regulatory bodies over issues such as:

- how the material should be handled;
- who should be involved or present during the relocation processes;
- what, if any, ceremonies should be performed and who should perform these;
- where should the features be relocated to; and
- how they should be managed in their new location.

Case study 5 from Murowa Diamond Mine in Zimbabwe shows the importance that communities can place on the relocation of significant and threatened cultural heritage such as graves. In this example, importance was placed on respecting the cultural values and concerns of family members when considering, planning and implementing the grave relocations. The country's regulatory guidelines were also closely followed.



Zvishavane
Zimbabwe

Case study 5: Rio Tinto in Zvishavane, Zimbabwe

Planning relocation of significant heritage and honouring cultural needs

The Murowa Diamond Mine (Murowa) is a small-scale operation located in the Zvishavane District of Zimbabwe. The operation is owned by Murowa Diamonds Limited, with shareholders Rio Tinto (78 per cent) and Riozim Limited (22 per cent). The mine is managed entirely by Rio Tinto. The development of a mining operation at Murowa required the resettlement of 142 families and the relocation of over 200 graves associated with these families.

Challenge: Resettling people and heritage

The challenge for Murowa was to achieve a successful and sustainable resettlement process, which is complex for both the company and for the affected community. Physical relocation presents challenges to both the resettled and to existing communities in terms of restoring their livelihoods and re-establishing a sense of place and belonging in the new resettlement location. Although the families agreed to be resettled off their ancestral land they expressed significant concern over the relocation of their ancestors' graves. Cultural beliefs stipulate that the dead should remain buried on the affected families' ancestral lands and are not to be disturbed.

Process: Address cultural and legal needs

During the grave relocation planning process, Murowa consulted openly with the affected families, the local chief and government officials to work collaboratively to address concerns and consider options. Through this engagement Murowa learnt of the traditional belief that ancestral spirits guide families, villages and whole communities on a daily basis. In carrying out the relocation of the graves, Murowa needed to address the cultural needs of the community while also complying with regulatory requirements in the region.

Concerns from the community included:

- whether the correct ceremonies would be performed at exhumation and reburial;
- whether the company would pay for all appropriate relatives to be present at the relocation; and
- where the graves would be relocated.

Through this consultation process, it was agreed that the graves could be moved from within the homesteads located in the mine plan area to either of two new cemeteries built by Murowa, located outside the mine site itself. This outcome meant that the graves would still be located in their traditional lands, under the leadership of their original chief, and families could still return to visit their grave sites and their home community. Murowa provided funding for all necessary materials and support to conduct exhumation and reburial ceremonies, including cultural materials associated with funeral services and the transport costs of relatives returning for the ceremonies.



The exhumations had to be conducted in accordance with public health regulations and policy. Considerable planning also went into ensuring that the correct bodies were exhumed in accordance with the Deeds and Registration policy. Where no records existed, the chief and/or his subordinate had to sign affidavits to vouch for the identity of the deceased. This process ensured that relatives would not lose track of their deceased. Where bodies were not found in their graves, an agreement was reached with the affected family to take soil and reburial in the normal way.

Outcome: Working together for a positive outcome

Through effective planning, Murowa was able to incorporate community sensitivities and considerations into the grave relocation plans as well as to meet government health regulations. Murowa sought agreement from both the community and local government authorities on how to mitigate the impact of the grave relocation process. By respecting local ways of treating the dead and allowing the active participation of community members and local government, Murowa demonstrated its respect for the local community and their way of life. This was an important component of the successful resettlement process that enabled the Murowa mine development to proceed.

5



Top
New grave sites constructed for the purposes of relocating the graves that were inside the Murowa Diamond Mine plan area.

Above
Levie Moyo in the kraal built on his homestead by Murowa Diamonds. Family member Emanuel Mvuri is in the background. Murowa Diamonds built farm facilities in Shashe for each resettled family that had a farm on land at Murowa to enable the families to maintain their livelihoods after resettlement.

Circle
Community members overseeing the exhumation of graves that were relocated from the mine lease.



Above
Justina Willis of the Yinjaa Barni Art Group paints while her son looks on. The Yinjaa Barni Art Group, in the Pilbara region of Western Australia, is supported by Rio Tinto Iron Ore.

Left
Pansy Sambo of the Yinjaa Barni Art Group with one of her artworks.

Compensation and cultural offsets

Rio Tinto businesses are required to mitigate direct damage to tangible cultural heritage and should also consider ways to deal with the more difficult issue of changes or losses to intangible cultural heritage. Compensation of some form may be necessary. Complex political battles (within communities and between communities and companies) can occur over compensation for damages and, therefore any compensation methods need to be sensitive to the context. At Rio Tinto cash compensation is recognised as an appropriate mechanism in some situations, but an emerging approach is mitigation or compensation in the form of a 'cultural offset'. A cultural offset is a set of measures intended to protect, perpetuate or enhance the cultural heritage of the community which may be accepted by them as compensating for any residual, unavoidable harm, loss or change caused to cultural heritage by a development project. An important principle is to limit cumulative impacts and ensure an overall positive outcome for cultural heritage values.

Cultural offsets, like biodiversity and environmental offsets, should exceed the life of the operation and be able to continue into the future without the operation's support. They should enhance the heritage values of a community. To ensure transparency, cultural heritage offsets should be defined as such by the relevant community and stakeholders.

Case study 8 (page 64) from Rio Tinto Coal Australia outlines their approach to potentially intractable cultural heritage situations. Using a net positive approach, Rio Tinto Coal Australia identifies opportunities within the broader cultural landscape to offset any unavoidable disturbances. In such cases, well-planned cultural heritage offsets can enhance certain cultural heritage values and more than offset the impact of the original loss.

Cultural offsetting is a new and difficult area to navigate, as it is very hard to compare or substitute one type of heritage value for another similar or different type of value. However, regulatory requirements are increasingly heading in this direction, including in jurisdictions where Rio Tinto operates. Examples of cultural offsets include:

- documenting local oral histories, genealogies or other significant intangible heritage;

- the documentation or research (interpretation/publication) of significant tangible cultural heritage places;
- establishing museums or cultural centres;
- the conservation and presentation of other culturally-significant landscapes or features outside the operation area to be used by community members in accordance with their cultural aspirations; and
- initiation and continuation of cultural programmes that focus on local cultural practices (note – these can mesh with environmental offsets involving documentation and maintenance of traditional ecological knowledge and its connections to use and management of biodiversity and landscape).

Enhancement

Cultural heritage management is as much about maximizing positive opportunities as it is about managing negative impacts. Not all management options need to respond to a negative cultural heritage impact. The business should also be aware of and actively seek opportunities to enhance the local culture. Cultural offsets (like those above) can also be used as cultural heritage enhancement strategies.

2.3.3 Protecting intangible cultural heritage

Although it is an artificial distinction, for the sake of efficient management and programme delivery, intangible cultural heritage considerations can be treated separately from tangible heritage. This helps to safeguard intangible cultural heritage which may otherwise not receive formal protection under cultural heritage management plans that are focussed on tangible assets.

Rio Tinto businesses are encouraged wherever possible to assist the continuation of relevant cultural practices such as:

- local languages and traditional customs;
- land-uses and other traditional economic practices;
- the retelling of local stories;
- holding of local festivals and performance of local ceremonies; and
- the continual passing of these practices on to younger generations.

It is important that in so doing we do not inadvertently contribute to the stagnation of cultural practices which are in reality dynamic and always changing.

Often the protection of intangible cultural heritage will be addressed in an operation's multi year Communities plan or social impact management plan. An operation's CHMS should outline which part of the business is accountable for specific aspects. For example,

Human Resources is accountable for cultural inductions and dual language policy, and Environment for community participatory environmental monitoring.

Limits of acceptable change

Culture changes and adapts continually in response to many factors, such as subsistence practices, land tenure arrangements, migration, external influences and economic change. People will often be more comfortable with the changes brought about by a large development project once they have considered the full range of its impacts on the socio-cultural wellbeing of their community.

It is important to engage with communities to identify what form and levels of cultural change are acceptable to them, and then design operational practices and cultural programmes that target the areas they are most concerned about or motivated by. Rio Tinto encourages all its businesses to understand and set 'limits of acceptable change' with local communities. Essentially this sets the level of change to a cultural heritage place, object or practice, or the cumulative impacts to all these, acceptable to a community once all the positive and negative impacts have been taken into account. These limits have to be defined, and often redefined, over the life of an operation. For example, the Oyu Tolgoi project in Mongolia (case study 10, page 74)

has adopted this approach and will track impacts to cultural heritage against locally-defined levels of acceptable change.

The use of a 'limits of acceptable change' framework is part of our overall approach to Communities work, which ought to be holistic, endorsed locally and contribute to broader community development. This framework can link to or be a component of a Social Environment Impact Assessment (SEIA).

Cultural heritage programmes and partnerships

Cultural programmes are key components of an operation's cultural heritage management system. Cultural programmes contribute to the economic development of communities, consistent with the Millennium Development Goals. For example, cultural heritage management can help to alleviate poverty by enhancing tourism or providing opportunities to make and market cultural goods and services. The protection or revival of traditional farming and grazing practices can enhance food security while traditional land use practices can contribute to environmental sustainability. The sustainability and self reliance of a community can be greatly enhanced by assisting it to form strong external ties beyond the operation that advance their own development aspirations. Cultural programmes are excellent vehicles for such partnerships.

Box 8 gives some ideas of types of cultural programmes that may be applicable to your operation.

Case study 6 demonstrates how cultural practices can lead to measurable community development outcomes such as improved health and wellbeing and increased school attendance. The case study outlines the importance of community desire and support for cultural programmes to ensure the sustainability of the programme. Case study 7 documents Richards Bay Minerals' establishment of the Mananga Heritage Centre, which promotes local cultural heritage in a way that is educative to the wider public and has contributed to community pride in their own unique history.

8. Potential cultural programmes

- Cultural celebrations: helping communities to stage large celebrations/festivals to celebrate culture can help to strengthen and uphold a sense of community.
- Dance, song/music, art, performance: sharing traditional means of artistic expression is considered highly important to community and also to help pass down these practices to youth.
- Education: facilitating cultural education or formal cultural heritage training helps build community capacity, self-empowerment and pride.
- Environmental programmes: promoting local agricultural practices, subsistence farming, rain-water harvesting, biodiversity monitoring and management and recycling all have positive environmental and cultural outcomes.
- Community led oral history collection: many communities value the documentation of their traditional stories and knowledge through innovative and interactive multimedia tools.
- Economic projects: programmes that build businesses around cultural heritage and creative activities can contribute to poverty reduction and economic growth.
- Youth engagement: mentorships, summer camps and employment in cultural activities provide opportunities for older community members to pass on knowledge to young people. They can help younger generations to retain their culture, identity and pride.
- Women's programmes: craft, agriculture, health and cottage industry programmes that target women through these cultural activities. Women are often marginalised within communities: these programmes can empower them and help to develop a mutual support system.
- Community health programmes: focusing on nutrition, exercise, safeguarding traditional medicinal practices, disease education, drug/alcohol abuse support. Promoting good health can help limit many of the undesirable impacts of development.



Rio Tinto Aboriginal Fund
Australia

Case study 6: Rio Tinto Aboriginal Fund, Australia

Supporting culture beyond our operations

The Rio Tinto Aboriginal Fund was established in 1996 by Rio Tinto to reflect our commitment to active engagement with Aboriginal people and communities in Australia. The Fund operates independently of Rio Tinto and provides A\$1.8 million (2011) annually in funding to support community initiatives. Programmes selected for funding focus on areas such as education, health, culture, youth and leadership and social justice. The cultural programmes focus on preserving culture through recording initiatives, promoting cultural knowledge transfer between generations, and cultural celebration through festivals, performances and workshops.

Challenge: Supporting culture beyond our operations

The challenge for Rio Tinto was to develop social and economic wellbeing in Australian Aboriginal communities beyond those directly affected by operations. By supporting programmes in any Aboriginal community or on a national basis, the Fund is designed to achieve a broader distribution of social and cultural benefits throughout Australia. The geographic proximity of a proposed initiative to a Rio Tinto operation does not affect the Fund's decisions.

Process: Plan programmes to preserve, celebrate and promote culture

The Fund has seven board members, three of whom are prominent Aboriginal figures, providing a knowledgeable and experienced perspective on Indigenous issues. Cultural programmes chosen by the Fund may contribute to the preservation and/or celebration of culture or use culture as a vehicle to improve the social wellbeing and economic participation in Aboriginal and Torres Strait Islander people and communities. Cultural programmes in the past have included recording cultural knowledge and practice or promoting cultural celebration through festivals and performances. By promoting Indigenous culture at a regional or even national level, cultural programmes supported by the Fund aspire to raise the status of all Aboriginal people in Australia.

In the experience of the Fund, cultural initiatives from communities with strong organisational structures and capacity to manage their own programmes have proven to be the most successful. This is because successful cultural programmes depend on strong planning processes, skilled implementation and continued monitoring against key objectives. To ensure that programmes have the greatest chance of building the capacity of Indigenous people, the Fund looks to support programmes that:

- meet a need expressed by Aboriginal people;
- are initiated by Aboriginal people;
- involve Aboriginal people in their development, management and implementation;
- have broad community support;
- are centred on building the strength and capacity of Aboriginal people and communities;
- deliver direct sustainable benefits to Aboriginal people; and
- have clearly defined outcomes.



For example, the Fund has part-funded the ongoing Milpirri festival, a two-yearly cultural celebration by Warlpiri people in conjunction with Tracks Dance Company. The Milpirri festival demonstrates that cultural celebration can effectively contribute to community development. Milpirri engages Warlpiri communities in music, dance, ceremonies and painting in order to build the interest of younger Warlpiri in their cultural heritage. The result has been a strengthening of intergenerational and cross-community bonds and growing self-esteem among young Warlpiri. The benefits are being seen in increased school attendance, cultural revival, the acquisition of the skills needed to stage a large cultural festival, and an improvement in the physical wellbeing of those involved in staging Milpirri.

Outcome: Milpirri – a cultural heritage success

The planning expectations of the Fund serve as a good example of the characteristics that operations should consider when funding cultural programmes that will enhance their cultural heritage management work. The experiences of the Fund demonstrate that attention to cultural programmes in cultural heritage work is valuable and with proper planning and implementation, they can have wide social and economic benefits that continue beyond the life of the programme itself. The Milpirri programme for example, has succeeded in not only protecting, celebrating and continuing the cultural heritage of Warlpiri communities but also demonstrating that capacity can be built through the self-management of cultural events.

6



Top
Milpirri Festival 2009. The Rio Tinto
Aboriginal Fund has supported the
Milpirri Festival, which promotes
cultural celebration and contributes
to community development, since
2007.
Above
Milpirri Festival, 2007.
Circle
Milpirri Festival, 2009.



Richards Bay
South Africa

Case study 7: Rio Tinto in Richards Bay, South Africa Mananga Heritage Centre: a living memorial

Richards Bay Minerals (RBM) mines mineral sands from the coastal dunes of the KwaZulu-Natal province in South Africa. RBM is owned by Rio Tinto (37 per cent), BHP Billiton (37 per cent), Blue Horizon Investments (24 per cent – a black empowerment consortium of local businesses and host communities), and RBM permanent employees (2 per cent). Since the start of mining in 1976, RBM has today become one of the world's largest producers of titanium products. The mining operations at Richards Bay occur in an area rich with archaeological sites, containing artefacts from the very first occupants of the region who lived there more than 3500 years ago and the products of ancient metal working for which the area is well known. In particular, this region produced many of the armaments used during the expansion of the Zulu Kingdom. Notably, the Mbonambi people were the makers of the short spear used by Zulu warriors during the reign of King Shaka.

Challenge: Managing heritage findings and mitigating cultural loss

As the Richards Bay Minerals' mining process involves wide-scale removal of surface deposits the company has had a longstanding programme of archaeological monitoring, assessment and mitigation in advance of mining. This work has excavated or recorded over 250 archaeological sites. Because of the region's history, some of these sites and artefacts hold both local and national significance. As part of the ongoing consultative and engagement framework, the local community of Mbonambi expressed a desire to have a way of preserving and promoting their cultural and historical heritage. The challenge for RBM was to respond to community expectations over potential cultural heritage loss and to the community's desire to promote their heritage.

Process: Create the Mananga Heritage Centre – a 'living memorial'

Responding to the wishes of the Mbonambi community, RBM established the Mananga Heritage Centre as part of its cultural heritage management initiatives. The Centre is the culmination of several years work from a

unique partnership between RBM, Umlando, Amafa akwaZuluNatali (the government heritage authority) and the Mbonambi community. The objective of the centre is to preserve the cultural history and heritage of local communities with a long term aim of developing it as part of a local tourism route, preserving not only the past but improving the socioeconomic future of the community.

Described as a 'living memorial' rather than a museum, the Mananga Heritage Centre is designed in an interactive way to encourage cultural education via a 'hands on' approach. Interpretative signage at the Mananga Heritage Centre is based on *amasiko*, or local oral stories, recorded by RBM as part of their cultural heritage projects. The centre consists of three thatched rondavels (a typical style of house in South Africa) made of traditional materials such as anthill clay and cattle dung. Early metal work artefacts as well as other archaeological objects excavated from the area are on display. These objects are on lease from the Natal Museum where all material excavated by the mine is held.



In between the three rondavels is a demonstration garden representing a unique form of living heritage preservation. The garden grows a number of traditional medicinal plants including the African potato and plants which heal broken bones and cuts. Visitors can walk through the garden and see the same plants which were used by Mbonambi community ancestors and other historical figures like King Shaka.

Outcome: Promoting community pride and knowledge

Through their incorporation at Mananga Heritage Centre, RBM is playing an active part in safe-guarding the community's oral history and traditional ways of passing down information to future generations. It combines the Western concept of a museum with the truly African sense of fluid history, tradition and ancestry. This management option promotes the community's cultural heritage in a way that is educative to the wider public and has increased community pride in their own unique and valuable history. RBM continues to upgrade

and improve the centre, thus promoting the development of the centre as an active and evolving cultural community centre. RBM is also working on strategies and procedures for handing over the management of the centre to the local community to encourage local cultural heritage management.

7



Top
Thatched rondavels built in the Umbonambi community as part of the Mananga heritage centre.
Above
This display is based on the oral history about the Mbonambi tribe, provided by Mr Mbuyazi, the chief headman of Inkosi Manqamu. The display is housed in a rondavel in the Mananga heritage centre.
Circle
Nomusa Mthethwa from Mbonambi community working in the medicinal garden at the Mananga heritage centre.

2.3.4 Integration of cultural heritage across the business

A successful CHMS depends on continual communication and engagement across the operation's many functions. A systematic approach ensures that:

- all people with cultural heritage accountabilities perform their functions;
- tangible cultural heritage is not inadvertently damaged by employees or contractors;
- employees and contractors do not act in culturally inappropriate ways, cause incidents of cultural offence or inadvertently contribute to the loss of intangible cultural heritage;
- corporate knowledge of cultural heritage management does not reside with individuals;
- cultural heritage management runs smoothly with as little impact on operational activities as possible;
- relevant employees and contractors are aware of the cultural implications of non-cultural heritage initiatives such as environmental management and economic development programmes; and
- relevant employees and contractors help to identify issues that affect cultural heritage management.

Operations

To ensure cultural heritage is not inadvertently impacted, operations should employ a systematic internal cultural heritage permitting/authorisation process. The following are examples of approaches used by Rio Tinto operations:

Internal ground disturbance authorisation process: This is a control measure that ensures cultural heritage assessments and management activities are aligned with operational timelines and that operational activities only proceed once formally authorised (internally and externally as required). It also ensures that any cultural heritage management conditions are clearly defined and communicated to the employees and contractors undertaking the activities.

Cultural heritage permit system: Anyone seeking to undertake works which may impact a cultural heritage feature should have a permit that is approved by the cultural heritage (or relevant) department.

Zoning or buffer system: This system can minimise delays to operational activities. A buffer is maintained by surveying, assessing and mitigating cultural heritage ahead of operation development. This requires effective medium to long-term operational planning for future land use needs. It should be based on clear demarcations of land use areas that: have been cleared

for development; have clearance pending; or which contain significant cultural heritage and require the protection of the cultural heritage values. This information should be based on the results of cultural heritage surveys, assessments and management activities, and be managed through a GIS.

The integration of each of the above elements can provide a multi-faceted and interactive approach, which ensures the safeguarding of identified and unidentified cultural heritage, as well as minimises impacts to operational activities.

Environment

In some instances, environmental management plans will need to take account of the cultural values of natural resources, and the cultural aspects of resource use, to ensure that they enhance rather than undermine cultural heritage values.

Examples of where environmental and cultural plans overlap are:

- continued customary use of biological resources;
- restricted access to places of cultural value;
- the recognition and protection of cultural values of water and other natural resources;
- the introduction or elimination of foreign species in the area; and
- the respect, preservation, protection and maintenance of traditional ecological knowledge, innovations and practices.

The inclusion of local communities in an operation's environmental management and rehabilitation programmes can have positive outcomes for both cultural heritage and ecological objectives, such as:

- fostering cultural maintenance and the transmission of cultural knowledge to future generations;
- making good use of the extensive environmental knowledge of local people;
- training and employing local people in environmental management; and
- contributing to our goal of co-management.

Health, Safety and Environment

Cultural heritage considerations ought to be included in health, safety and environment (HSE) incident reporting. Some HSE incidents, such as hitting wildlife with a company car or spilling chemicals, may have a cultural impact as well as an environmental one. For example, if the animal that was hit had religious or spiritual significance to local people or the chemical spill affected traditional food sources, water or access to cultural sites, the cultural heritage impacts should be included in incident reporting and mitigation.

Human Resources

The specific cultural norms of local community workers need to be considered in human resources procedures to ensure the recruitment and retention of a diverse workforce. It is important that new employees are made familiar with local cultural heritage issues and how they are managed. Where the operation's context demands it, all employees should also attend cultural awareness training, not just expatriate employees. Nationals from different areas may also need to familiarise themselves with local cultural norms. Box 9 lists some elements of cultural induction programmes.

Case study 8, on Rio Tinto Coal Australia, shows how a Cultural Heritage Management System has been integrated across its operations in eastern Australia. This approach leads to stronger community relations and avoids conflict arising from a community's concerns over its cultural heritage.

9. Elements of cultural induction programmes

Cultural heritage induction programmes can include:

- information on local geography, socioeconomic issues, government, history, culture, customs, religion, local taboos, and festivals;
- interactive approaches to make employees aware of local issues and sensitivities (eg: role play, self reflection and group discussions and activities);
- reflection on the participant's own cultural norms and how these impact on their appreciation of local cultural norms;
- the locations of culturally important places that should be avoided by employees;
- explanation of local social expectations and a description of behaviours that are culturally inappropriate and therefore should be avoided;
- explanation of cultural practices deemed significant by the local community;
- introduction to some of the tangible cultural heritage features of the area;
- teaching of basic phrases in the local language(s);
- an opportunity for employees to meet and talk to some local community members; and
- a performance or feast prepared by the local community.



Upper Hunter Valley
Australia

Case study 8: Rio Tinto in the Upper Hunter Valley, Australia Implementing an integrative Cultural Heritage Management System

Rio Tinto Coal Australia has several mining operations and projects in Queensland and New South Wales (NSW). Specifically, Rio Tinto Coal Australia manages Coal & Allied's coal mining operations in the Upper Hunter Valley including Mount Thorley Warkworth Operations, Hunter Valley Operations and the Mount Pleasant Coal Project. The Hunter Valley is a region with extensive mining and agricultural land use.

Challenge: Achieving timely land access in the context of cumulative impacts

The challenge for Rio Tinto Coal Australia is to achieve timely access to land for mining operations while meeting the expectations of the Aboriginal community of the Upper Hunter Valley. The community is concerned about the cumulative loss of both tangible and intangible cultural heritage as a result of extensive mining developments and past and current land use practices across the region. The community has made it clear that their acceptance of impacts to their cultural heritage from mine operation and expansion depends on securing the permanent protection and community management of other important cultural sites.

Process: Integrate the Cultural Heritage Management System

Rio Tinto Coal Australia implemented its Cultural Heritage Management System (CHMS) in 2006. This outlines processes that integrate cultural heritage management into all stages of the operation lifecycle including exploration, feasibility, construction, mining, closure and post closure. The business's CHMS ensures that Aboriginal communities with interests in areas and projects owned or operated by the company can fully participate in the identification, significance assessment, safeguarding and ongoing management of their cultural heritage.

To ensure that cultural heritage is integrated into all operational activities, Rio Tinto Coal Australia requires that all ground disturbing activities be authorised through a Ground Disturbance Permit (GDP) system. The GDP system includes a cultural heritage authorisation process, managed by the manager of Cultural Heritage, which includes assessing the proposed disturbance activity against the

operation's Cultural Heritage Zone Plan (CHZP). The CHZP clearly delineates areas or zones where ground disturbance may or may not occur depending on the cultural heritage management status of the zone. The status of the zone is determined by the level of cultural heritage assessment and mitigation that has been conducted in that area.

The CHZP helps to achieve timely access to land for mining operations as the cultural heritage assessment and management programme is implemented at least five years in advance of mining development. This development management buffer provides operational flexibility. It also ensures salvage mitigation of cultural heritage sites only occurs in areas that are to be developed. As a planning and management tool the CHZP prevents any unnecessary cultural heritage mitigation, avoids unintended disturbances and integrates the cultural heritage management system into the business's planning and operations.



Rio Tinto Coal Australia's CHMS contains an inclusive and robust community consultation process so the heritage management outcomes meaningfully address Aboriginal community concerns and cultural values. This approach, in the context of the company's broader long-term Aboriginal community relations initiatives, seeks to deliver improved social, cultural, economic and conservation outcomes to the Aboriginal communities in the area.

In order to develop and maintain good relationships and identify community cultural values, Rio Tinto Coal Australia's Cultural Heritage Working Group consultation process seeks to directly engage with Aboriginal community stakeholders.

Rio Tinto Coal Australia's Aboriginal Cultural Heritage Conservation Areas Initiative has grown from this consultation process. The initiative aims to identify lands in the broader cultural landscape and consider these for long-term conservation and management

by the Aboriginal community in order to offset the unavoidable disturbance of cultural heritage in mining development areas. The Wollombi Brook Aboriginal Cultural Heritage Conservation Area is an example of one such offset. This 475ha cultural conservation area will protect a wide range of cultural sites and landscapes including the Bulga Bora Ground, a site of great significance to Aboriginal people of the Upper Hunter Valley Region. The conservation area will also provide training and employment opportunities for local Aboriginal people in cultural heritage and biodiversity conservation management, education, governance, business development, and land and natural resources management.

Outcome: Mutual benefit for Aboriginal communities and Rio Tinto

By creating comprehensive, systematic and well considered plans, processes and procedures, Rio Tinto Coal Australia has created a formalised and well-integrated CHMS. The system ensures operational planning

and activities are consistent with both Rio Tinto Coal Australia and the Aboriginal community's needs. When the planning and implementation of a CHMS are well integrated within mine planning and operational procedures, and are developed in direct collaboration with the Aboriginal community, the outcomes are mutually beneficial and build stronger relationships with community. At the same time, they reduce the impacts and risks associated with managing cultural heritage within the mining development environment.

8

Top
Aboriginal community representatives at the Warkworth Sands Archaeological Project in 2008. The Archaeological Project was at the Mt Thorley Warkworth Coal Mine, in the Hunter Valley, New South Wales, Australia.

Circle
Restricted entry sign at the Wollombi Brook Aboriginal Cultural Heritage Conservation Area in the Mt Thorley Warkworth Coal Mine. This sign is at an access point to a sensitive area to limit access to authorised persons only.

2.4 Monitor, evaluate and improve

Monitoring, evaluating and improving on the performance of an operation's cultural heritage management system is essential. Compliance with Rio Tinto's standards is assessed at regular intervals to evaluate performance and should also be used as a basis for continual improvement.

Monitoring and evaluation of cultural heritage data and systems is essential to:

- ensure that programmes and projects are achieving their objectives;
- ensure that any adverse impacts are outweighed by positive impacts;
- measure progress against cultural heritage commitments;
- enable better policy and planning; and
- ensure continual improvement.

Checklist	
[✓]	Does the monitoring framework include cultural heritage indicators that are underpinned by credible data and regularly updated?
[✓]	Are monitoring and evaluation processes participatory wherever possible, and inclusive of a wide range of community members including men, women, young and old?
[✓]	Are changes being made to programmes or work procedures as a result of monitoring?
[✓]	Are regular assessment processes undertaken that are both informal, to track progress, and formal to rank performance?
[✓]	Are formal evaluation processes undertaken at the close of the programme or activity which analyses results and measures them against original objectives?
[✓]	Is continual improvement being achieved through regularly updating cultural heritage system components in line with evaluation outcomes?
[✓]	Are cultural inductions, facilitated by local community groups, compulsory for all employees, including non-local nationals?
[✓]	Are all employees required to do periodical refresher training on cultural considerations?

2.4.1 Monitoring – “How are we doing?”

Monitoring involves tracking, in a systematic way, how operational activities are affecting communities and stakeholders, both positively and negatively. The monitoring of the operation's overall approach to the management of cultural heritage is a part of this. If properly done, monitoring can lead to changes in the project or operation to address shortcomings or develop opportunities that have been identified.

Credible data are essential for effective monitoring. While precise measurement of impacts and changes is not always possible, monitoring systems should be robust enough to enable operations to assess whether progress is being made towards key targets and objectives and to identify issues that require attention.

Impacted groups and communities should be involved in the monitoring process where possible – not just as informants, but as

active participants. A participatory approach promotes a greater sense of community ownership and helps ensure that proper weight is given to local knowledge.

Case study 9, from Diavik Diamond Mine in Canada, shows that community participation in environmental monitoring can also have positive cultural heritage outcomes by encouraging the continued practice and transmission of traditional ecological knowledge.



Left
 Borax's 20 Mule Team. Rio Tinto's borate business began in California's Death Valley in the 1880s. The 20 Mule Team Borax® is an important part of the region's cultural heritage.

Below
 Part of a wooden wheel for draining a mine, dating from Roman times. This artefact was found at the Rio Tinto Copper Mines, Huelva, Andalusia, Spain, in the 1870s. The artefact was donated by Rio Tinto to the British Museum in 2010.

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Northwest Territories
Canada

Case study 9: Rio Tinto in the Northwest Territories, Canada Incorporating traditional knowledge into scientific monitoring at Diavik Diamond Mine

Diavik Diamond Mine (Diavik), a joint venture between Rio Tinto (60 per cent) and Harry Winston Diamond Limited Partnership (40 per cent), is located 210 kilometres south of the Arctic Circle in the Northwest Territories (NT) of Canada. The mine has been operating since 2003.

Challenge: Incorporating traditional ecological knowledge in mine site monitoring

The challenge for Diavik is to operate in this remote location while respecting local land use practices and avoiding negative impacts on the subsistence needs of local Aboriginal organisations. The mine encompasses around 10 sq km in an area of traditional land use identified by local Dene, Métis and Inuit communities in the area. These groups depend on the natural environment and its wildlife for their subsistence and symbolic livelihood, and therefore have a deep understanding of and connection to the land. For these reasons the environmental health of the region is of great importance.

Process: Involving Aboriginal organisations in environmental monitoring

In response to community concerns about a lack of certain environmental regulations, Diavik established an Environmental Agreement that allows for an Environmental Monitoring Advisory Board (EMAB). The EMAB includes representatives from each of the five First Nation groups affected by the mine, governments and Diavik. With a mandate to facilitate collaboration, one of EMAB's aims is to foster an open exchange of ideas on traditional ecological knowledge and scientific monitoring methods. Collaborative consultations between EMAB and Diavik have resulted in environmental monitoring programmes that combine traditional and Western scientific knowledge to monitor and protect wildlife in the mine affected area. Two examples of these outcomes include the fish palatability study and the caribou fencing work.

Fish Palatability Study: To assess the health of fish in the mine affected area, Diavik undertakes regular monitoring of fish in Lac de Gras. On top of this regular monitoring, Elders and youth from the communities are encouraged to participate together in a study to monitor the continued palatability and texture of lake fish. Community representatives rate the fish on appearance before cleaning, and on look and taste once cooked. Ratings are compared to several benchmarks, including the previous year's survey, the quality of fish in the person's home area and perceptions of the health of fish prior to mining operations. Tissue and organ samples of the same fish are submitted for laboratory analysis to determine metal levels. The palatability study has dual outcomes: contributing to environmental management and cultural heritage management on site while upholding fishing as a traditional way of life through monitoring the operation's impact on favoured fish species.

Caribou Fencing: To address community concerns regarding caribou (a type of deer) potentially getting caught in the mine's Processed Kimberlite Containment (PKC) Area during their annual migration, the EMAB facilitated consultations between Diavik and local community leaders to come up with a suitable fencing solution.

The issues included:

- what time of year the PKC area should be fenced;
- how to avoid increasing predation of caribou along the fence line;
- who should be responsible for the design and location of the fence; and
- who should manage it.

The outcome from various workshops run by EMAB was a caribou fencing plan, designed and managed according to local traditional knowledge of caribou and predator activity, implemented by the operation.



Outcome: Shared knowledge and improved environmental monitoring

By integrating traditional knowledge with scientific procedures, Diavik has demonstrated the value of incorporating traditional knowledge into the company's monitoring processes. Through this collaborative work Diavik has drawn on different ways of thinking and observing the environment, which has helped to continue traditional ecological knowledge and subsistence practices. This has contributed to effective cultural heritage management, better relationships with local communities and meeting the operation's environmental commitments outlined in the Environmental Agreement.

9



Top
Community members participating in a fish palatability study. The study is conducted as part of Diavik's fisheries authorisations requirements and environmental agreement commitments.

Above
Caribou fencing. Diavik and local community leaders worked together to plan a fencing solution based on traditional knowledge of caribou and predator activity.

Circle
Community members inspecting lake trout during a fish palatability study.

2.4.2 Targets and indicators for monitoring

Central to the monitoring process is the creation of appropriate targets and indicators to help measure activity and performance. Well-planned targets and indicators can be used to monitor both external processes of change and evaluate the operation's performance against its stated cultural heritage goals. By focusing attention on desired outcomes, the process of developing targets and indicators can also help operations to re-design, implement and improve their CHMS and performance.

Carefully defined local targets, and continuous improvement of their measurement, are necessary for demonstrating that operations meet and, if possible, exceed:

- specific regulatory requirements;
- internal requirements;
- commitments made in negotiated sovereign investment and community consent agreements; and
- general community expectations.

Rio Tinto now requires its businesses to observe the Rio Tinto Communities global target,⁴ which states that, by 2013, all operations should develop locally appropriate social performance indicators that demonstrate a positive contribution to local communities and their economic development, consistent with the Millennium Development Goals (MDGs). Meeting this requirement can be challenging, as much of the performance data

currently reported is focused on effort and activity, rather than outcomes or impacts.

While culture, including cultural heritage, is not specifically referred to in the MDGs, the UN emphasises its importance for development and contributing to achieving the MDGs. The cultural sector, through tangible and intangible heritage, creative industries and various forms of artistic expressions, is seen as a fundamental component of sustainable development and as a powerful contributor to economic development, social stability and environmental protection. Businesses should take this into account in developing their cultural heritage indicators and reporting against the Communities global target.

Figure 3 outlines the process steps and key questions for monitoring and reporting on contributions to cultural heritage that may assist businesses in the design and development of targets and indicators.

Targets and indicators should be developed to reflect the local context and be integrated into the operation's objectives, business drivers and operational baselines. The best way to ensure that targets and indicators are locally appropriate is to reach agreement with local communities on their form. This does not necessarily require communities to be involved in the technicalities of measurement, but

what is desirable is community endorsement of priorities and a shared understanding of what will constitute evidence of progress. Where specific agreement is not possible, public reporting of targets and indicators will at least ensure that they are available for expert and community review.

The process steps are a useful tool for businesses developing targets and indicators, but several challenges remain, including how to measure individual contributions in a situation where there are many effects being felt, and how to obtain useful data cost-effectively.

The most useful targets are SMART. Targets qualify as 'SMART' if they are:

- **Specific:** Is the target well-defined?
- **Measurable:** Are tools to evaluate the target's progress available?
- **Attainable:** Are knowledge and resources necessary to achieve this target available?
- **Results focused:** Does the target add value to our work or approaches as a company?
- **Time oriented:** Is there a clearly-defined timeframe for achievement, including a target date?

In developing indicators to go with targets, the focus should be on measuring whether progress is being made towards desired outcomes, not just on the level of activity (eg: jobs carried out

or meetings held). In the case of cultural heritage, monitoring should be linked to the business CHMS and specific CHMPs. For example, what does the CHMP identify as significant and needing conservation, and what are the processes it establishes to achieve this?

The table on page 72 provides generic examples of possible goals, targets and indicators for cultural heritage. The table provides a range of measures that

are available and demonstrates how goals, targets and indicators link to each other; it is not intended to be a blueprint for a monitoring system. Operations will be limited in the number of targets and indicators that they can reasonably manage so prioritisation will be required. Factors to be considered in determining priorities include community expectations, the outcomes of internal risk analyses, regulatory requirements, and the

cost and practicality of obtaining the required data.

As described in case study 10 (page 74), the Oyu Tolgoi project in Mongolia has adopted a “limits of acceptable change” approach and is currently designing a monitoring framework to track impacts to cultural heritage against locally-defined levels of acceptable change. This will include impacts on the nomadic herding lifestyle and national traditions such as the Nadaam festival.

Figure 3: Process steps for planning, monitoring and reporting on contributions to cultural heritage



Examples of cultural heritage goals, targets and indicators

Goals/Objectives	Targets	Indicators
Better integration of cultural heritage into the business and adequate provision of heritage practitioners on site	<p>3 full time heritage practitioners employed</p> <p>20 community members on a regular monitoring roster by end 2012</p> <p>100% of other internal functions are aware of cultural heritage by end 2012</p>	<p>Number of heritage practitioners employed – measured quarterly and reported annually</p> <p>Number of community members participating in regular monitoring activities – measured quarterly and reported annually</p> <p>Number of internal meetings with other site functions regarding cultural heritage – measured quarterly and reported annually</p> <p>Findings from interviews with representatives of other functions</p>
Avoid any heritage incidents and legal breaches	<p>Zero heritage incidents/legislative breaches by 2012</p> <p>A detailed record of all chance finds will be put in place by end 2012 and updated regularly</p> <p>Zero damage to identified heritage places by 2015</p>	<p>Number of heritage incidents, legislative breaches – measured quarterly and reported annually</p> <p>Number of chance finds – measured quarterly and reported annually</p> <p>Number of instances of unauthorised damage to/destruction of identified heritage places – measured quarterly and reported annually</p>
Improve cultural awareness of employees	<p>100% of employees will complete cultural awareness training by 2013</p>	<p>% of workforce completed cultural awareness training – measured quarterly and reported annually</p> <p>Outcomes of follow-up surveys of employees who have done training</p>
Cultural heritage programmes to contribute to community economic development	<p>All cultural heritage programmes of the operation linked to contribute to broad community economic development goals by 2013</p>	<p>Documented case studies of where cultural heritage programmes have made a contribution to community development</p>
Engagement of the community in cultural heritage management	<p>Participation of community members in the design, implementation and review of all cultural heritage programmes/ activities by end 2012</p> <p>A complaint system identifying cultural heritage related complaints will be formalised by mid 2012</p>	<p>Number of community members participating in cultural heritage programmes – measured quarterly and reported annually</p> <p>Documented case studies of programmes/ activities in which community members have been involved</p> <p>Number of community members in leadership roles in cultural heritage programmes initiated by the operation – measured quarterly and reported annually</p> <p>Number of cultural heritage complaints received, tracked, responded to and resolved – measured quarterly and reported annually</p> <p>Community awareness of and confidence in the complaints management system, as measured through community surveys and/ or other engagement processes</p>
Net positive impact on cultural heritage	<p>Community has a strong sense of cultural identity and connection</p>	<p>Community perception of strength of their cultural identity – measure trends over longer timeframe</p> <p>Documented case studies of where the operation has been effective in protecting ‘at risk’ cultural heritage</p> <p>Number of instances of unauthorised damage to/destruction of identified heritage places – measured quarterly and reported annually</p>



Above
Archaeological excavation work has been undertaken at the La Granja copper project in Peru. The artefacts recovered from the La Honda valley area excavation have been donated to the Bruning Museum in Lambayague, Peru.



Oyu Tolgoi
Mongolia

Case study 10: Rio Tinto in Oyu Tolgoi, Mongolia Design and monitoring framework: standards of acceptable change

Oyu Tolgoi (OT) is the largest undeveloped copper-gold ore deposit in the world. OT is located in Khanbogd soum (district) in the Umnugobi (South Gobi) province of Mongolia. The majority of people in this area are nomadic herders who migrate seasonally between winter and summer pastures. The project is jointly owned by Rio Tinto, Ivanhoe Mines and the Government of Mongolia. The OT mine will be the largest financial undertaking in Mongolia's history and will contribute a sizeable portion to the nation's GDP. Mining is scheduled to begin in June 2012.

Challenge: Executing major development while considering local culture and heritage

The challenge for this project is enormous. The project, currently in construction phase, will constitute the largest mine in Mongolian history. It is located in a remote, undeveloped area and will need to operate in a way that does not devastate the rich local culture and heritage, potentially leading to social dysfunction and follow-on impacts to the company's social licence to operate. Owing to the scale of OT's operations and the lack of previous cultural heritage management regulations in Mongolia, the Cultural Heritage Programme at OT is likely to be viewed as a benchmark for new development projects in Mongolia.

Process: Establish a monitoring system

To assess the impact of this large-scale development project on the region's people and tangible and intangible cultural heritage, OT plans to monitor its impacts against community defined standards of acceptable change. In July 2010, OT began to develop a monitoring framework to track the impact of the operation on the region's cultural heritage and to monitor the performance of its cultural heritage programme against Rio Tinto standards and locally defined "Standards of Acceptable Change". (note: this approach is referred to as "limits of acceptable change" at Rio Tinto and within this guide)

The Mongolian International Heritage Team, a consortium of Mongolian and international cultural heritage experts, have been commissioned by OT to design a Cultural Heritage Programme for the project. The Team is using a Standards of Acceptable Change framework. The framework will define the acceptable level of change, according to the community,

to an intangible or tangible cultural resource or value that is possible without causing irreversible degradation to their cultural heritage as a whole. This will be used to design the Cultural Heritage Programme and all subsequent changes will be monitored against this framework.

This will enable OT to determine:

- how mining activities are affecting cultural heritage;
- how public programmes are enhancing cultural heritage; and
- whether the net impact is within the acceptable limits set by the community.

Community and broader stakeholder participation in the Standards of Acceptable Change framework is essential. The goal is for community members and stakeholders to identify cultural heritage threats and opportunities and acceptable standards of change, and to design feasible solutions and implement them as part of the Cultural Heritage Programme. The long-term aim of this participation is to build the institutional and individual



capabilities of government, non-government and private sector agencies and organisations so that they can take ownership of aspects of the Cultural Heritage Programme over time.

Outcome: Acceptable change alongside rapid development

Using the standards of acceptable change approach and related tools helps OT, local communities and stakeholders to design and implement an appropriate Cultural Heritage Programme in a manner that is responsive to changes in the OT project scope, as well as to the needs of the community during all stages of the project and its operation. By assessing impacts against locally defined standards and baselines, OT will be able to monitor the operation's impact on local cultural heritage and evaluate their progress against cultural heritage management objectives.



Top
The Oyu Tolgoi Cultural Heritage Plan design team and the Mongolian International Heritage Team members meet with Khanbogd soum community members during their joint field trip in September 2010.

Left
Dinosaur foot prints located in East Shar Tsav valley, Manlai soum. 2009

Circle
Local herder's camels pasturing around Oyu Tolgoi shaft 1 prior to the lease area being fenced. The sign on the camel is a traditional herding sign.

2.4.3 Evaluation and continual improvement – “How did we do and how can we do it better?”

Evaluation is the measurement of the outcomes of a project against its stated objectives. It is often done at the conclusion of a project and answers the question; “How did we do?”. For larger projects, evaluations may also be undertaken mid-stream as a way of assessing progress and identifying possible enhancements.

Monitoring involves the measurement of progress against indicators and targets, evaluation centres mostly on outcomes and impacts and aims to identify the factors that have contributed to – or detracted from – programme success. Evaluation involves a more detailed review of the operation’s cultural heritage approach and initiatives to ascertain if the operation is complying with all requirements, planned objectives are being achieved or any unintended or undesired consequences are developing.

Communities Site Managed Assessment

Evaluation of an operation’s cultural heritage performance is one element of our Communities Site Managed Assessment (Communities SMA), which checks compliance with the Rio Tinto Communities standard. This check also includes compliance with cultural heritage legislation and the operation’s CHMS, including formal cultural heritage management plans and agreements. Box 10 describes cultural heritage requirements that will be assessed in a Communities SMA.

A Communities SMA is intended to identify any actual or potential problems and areas for social performance improvement. It is conducted three-yearly or may be triggered by special circumstances such as a significant cultural heritage incident or a complaint alleging breach of compliance. Findings from the Communities SMA process and reporting requirements are detailed in the Report and communicate section of this guide.

Cultural Heritage Management System audits

Rio Tinto’s Australian businesses are required to have an audit of their performance against the requirements of the Rio Tinto Cultural heritage management standard for Australian businesses every three years as an input to the operation’s Communities SMA.

Continual improvement

– “How can we do better?”

The outcomes of monitoring and evaluation provide a firm basis for reviewing and updating plans and systems and taking corrective action where required. For example, monitoring may indicate that a project or programme is not performing as desired, in which case alterations need to be made to address the shortfall. It may also find that the original indicators established for the monitoring were unrealistic, in which case they may need to be changed to improve the process.

Case study 11, on Rio Tinto Iron Ore’s Pilbara operations, outlines elements of their cultural heritage approach that aim to continually improve performance as part of achieving their business objectives.

10. Evaluating performance against Rio Tinto's Communities standard

- Have you compiled a list of all tangible cultural heritage features?
- Do you have recorded information about the intangible cultural values associated with the site based on consultation and an understanding of local cultural norms?
- Have you documented all industrial and historical heritage features and values of the business itself?
- Have you developed and implemented a cultural heritage management system?
- Does the CHMS ensure the protection of tangible heritage features and also include the implementation of community programmes for the maintenance and protection of intangible cultural heritage?
- Was the CHMS designed around extensive baseline work conducted in consultation with relevant communities, and is consultation ongoing?
- Is the CHMS consistent with the operation's cultural heritage risk exposure?
- Are all ground disturbing activities compatible with all components of the CHMS?
- Are formal procedures such as cultural heritage assessments and cultural heritage management plans executed smoothly, expertly and in a timely manner?
- Has there been any avoidable damage to cultural heritage?
- Are significant incidents being reported?
- Is the heritage co-managed with relevant communities?
- Is the operation attempting to address changes that are occurring to local cultural norms?
- Are cultural heritage considerations being recorded in all agreements with indigenous groups wherever these groups have recognised legal rights or interests coincident with the operation's areas of interest?



Left

Dancers from the Ranomafana area of Southern Madagascar perform the Mangaliba dance which is a dance of celebration. The dance was performed at the Katrehaky cultural festival which is celebrated in Fort Dauphin, Madagascar, every August. Rio Tinto QMM supports the festival, which celebrates cultural diversity and community.



Pilbara
Australia

Case study 11: Rio Tinto in the Pilbara, Australia

Continual improvement of heritage performance

Rio Tinto Iron Ore's Pilbara operations in Western Australia, which began in 1966, consist of a network of 12 mines, three shipping terminals, six pastoral leases and over 1300 kilometres of heavy freight railway. The Pilbara operations span the traditional lands of nine different Aboriginal language groups. These lands have significant tangible and intangible cultural heritage values, including one of the richest concentrations of Aboriginal rock art in the world.

Challenge: Continuing to improve cultural heritage management

Beyond meeting their existing cultural heritage obligations and initiatives, Rio Tinto Iron Ore understand their challenge is to stay aligned with changing community sentiment and aspirations. To do this, Rio Tinto Iron Ore must continually improve their cultural heritage management across their geographically dispersed, rapidly expanding Pilbara operations.

Process: Go beyond compliance

Rio Tinto Iron Ore's Aboriginal Cultural Heritage Team is made up of over 20 professionals who ensure that the company's Cultural Heritage Management System complies with Rio Tinto standards and aim to continually improve the business's cultural heritage performance. Some of this work is formalised in new Indigenous Land Use Agreements with five Traditional Owner groups.

Important new developments which contribute to Rio Tinto Iron Ore's goal of continual improvement include:

Retrospective Surveying: As well as conducting heritage surveys prior to any new projects and ground disturbing works, Rio Tinto Iron Ore recognises the importance of reassessing existing projects and infrastructure to ensure that all aspects of its operations, new or existing, comply with their Cultural Heritage Management System and meet community expectations.

For example, much of Rio Tinto Iron Ore's extensive railway network was constructed over 40 years ago, before the introduction of heritage legislation and standards for undertaking heritage surveys and consulting with Traditional Owner groups. Rio Tinto Iron Ore engaged Traditional Owners to undertake cultural mapping along the rail line to gain a comprehensive understanding of the cultural values associated with the infrastructure and surrounding sites.

Cultural celebration: Rio Tinto Iron Ore works with Aboriginal groups to look after and celebrate their intangible heritage. This includes projects where it can provide resources or assistance to enable Aboriginal groups to continue to practice and pass on their cultural knowledge, beliefs and languages, while simultaneously improving the broader, non-Indigenous community's understanding and appreciation of Indigenous cultural values. Such projects



may involve documenting oral history, developing keeping places for cultural material and assisting with access to country. The Heritage Regional Standard of the new agreements formalises a process for these activities to progress.

Improving community capacity to manage cultural heritage:

Rio Tinto Iron Ore has committed to improving community capacity to manage cultural heritage through the development of several initiatives including:

- employing a Land Management Officer from each of the Aboriginal language groups to serve as a liaison between their group and Rio Tinto Iron Ore operations;
- the development and provision of a nationally accredited archaeological assistants training course; and
- offering assistance to Aboriginal groups to manage their heritage and environmental information in digital format.

Outcome: Evolving in line with changing community needs and aspirations

Rio Tinto Iron Ore has been operating in the Pilbara for over 40 years with a cultural heritage team in place for almost 15 years. The company has continually recognised and valued Aboriginal peoples' connections to country and their heritage values. Building on its growing history of cultural heritage management in the Pilbara, Rio Tinto Iron Ore strives for continual improvement and advancement of its Cultural Heritage Management System by reassessing its existing efforts as well as adjusting projects and plans to comply with the ever-evolving cultural heritage concerns of the Aboriginal community.



Top
On-site consultation with senior Nyiyaparli members for the Hope Downs 4 project, specifically the rail crossing of Weeli Wolli Creek.
L-R: Peter Sage (Study Manager, Rio Tinto Iron Ore), Luke Lowery (Heritage, Rio Tinto Iron Ore), Eric Parker, Stanley Watson, Gordon Yuline, Keith Hall, and Victor Parker.

Above
Wurrurnha rail bridge sign, designed by Mark Lockyer, a Kuruma Marthudunera traditional owner. The sign acknowledges a pool in the Robe River close to the rail bridge that is of importance to the Kuruma Marthudunera people.

Circle
An example of rock engravings on the Burrup Peninsula, Western Australia. Rio Tinto Iron Ore's cultural heritage management includes the protection of the rock art on its Burrup Peninsula leases.

2.5 Report and communicate

Reporting and communicating have both internal and external audiences. Internally, managers need to know how well risks are being managed, whether corporate requirements are being met, and how the cultural heritage management system is performing.

These outcomes are often reported via internal auditing and assessment procedures. Externally, community members, governments and the general public may need to know about the impacts of the operation on their cultural heritage, the actions that are being taken or are proposed to address community issues and concerns, and the cultural heritage management performance of the operation.

Checklist	
[✓]	Are all incidents reported on internally and communicated to the affected community and stakeholders?
[✓]	Are outcomes of Communities SMAs and community workbooks communicated to affected communities?
[✓]	Is communication with local communities conducted in culturally appropriate ways and considerate of local language and literacy?
[✓]	Are sustainable development reports accessible to the public, comprehensive, include both positive and negative outcomes and inclusive of cultural heritage and cultural programmes?
[✓]	Is there sharing of positive and negative outcomes between Rio Tinto businesses and operations?
[✓]	Are the operation's cultural heritage assets, or the cultural heritage associated with their land promoted more widely? If so is this conducted with the express permission of the custodians of that cultural heritage?
[✓]	Are the wishes of the cultural heritage custodians communicated to all relevant employees and where necessary the broader public to prevent disrespectful use or damage of culturally significant places, objects and practices?

2.5.1 External reporting

Reporting to local communities, stakeholders and the public on the cultural heritage management activities should be a routine part of an operation's cultural heritage management system. This external communication needs to be both on the actions and programmes being undertaken by an operation and on the outcomes of any significant heritage disturbances that may occur. External reporting should also demonstrate the operation

is complying with all relevant legislative or other requirements. Reporting on the quality of the management processes in place to celebrate an area's heritage values and to limit any incidents, and how any disputes were resolved, is more informative than the simple dollar spend on a programme or the number of incidents and complaints occurring.

Reports describing the cultural heritage of the area of the

operation (song, archaeology, etc) are irreplaceable records of human culture for use by future generations. Cultural heritage survey reports can disappear into our 'system' and never be seen again, resulting in the loss of important data over many years. Rio Tinto believes that, so far as cultural sensitivities allow, these reports should be placed in a publicly accessible archive or be made available online. Care must be taken, however if this

involves the open publication of site location data, as this can lead to potential negative impacts to sites from increased visitation, artefact collection, looting or graffiti. Where this is a possibility, location data should be kept secure or appropriate site management and protection measures put in place with communities and the relevant cultural heritage authorities.

As with all forms of public communication, the wishes of communities that hold the cultural heritage should be respected so that no cultural knowledge is used without their permission. Sometimes local communities are offended if their involvement in cultural heritage management is used for public-relations stories and unilateral publicity should be avoided. Meaningful and inclusive engagement should ensure that employees recognise, value and respect community concerns and that community members in turn trust the operation will act in their best interests in their management of cultural heritage information.

Local sustainable development reports

In accordance with the Global Reporting Initiative (GRI), Rio Tinto's business units prepare their own annual local sustainable development reports. The style and presentation of local reports should be appropriate for the local community and stakeholders.

Sustainability reporting guidelines are offered by the Global Reporting Initiative in the Mining Metals Sector Supplement.⁵ The Rio Tinto guidance for local sustainable development reports requires reporting against a number of issues related to broader, mostly intangible, aspects of cultural heritage, including:

- stakeholder engagement;
- human rights;
- environmental management;
- training and education; and
- a range of social performance indicators.

While there is no specific mention of reporting cultural heritage aspects included in the GRI guidance, operations should still consider cultural heritage when reporting. Reporting against 'Society Performance Indicators' allows for wide scope to report on efforts employed to reduce the impacts operations have on the communities in which they operate.

Box 11 provides some examples of cultural heritage management work that could be included in written sustainable development reports. Sustainable development reporting can also be done orally if this is a more appropriate method. If reporting orally then minutes should be taken and kept within the internal information management system.

Information and document management

The collection, use, disclosure and security of a community's cultural heritage information need to be handled by an operation in accordance with the wishes of that community and with relevant legislation. An operation may use a variety of physical and electronic measures to protect paper documents and electronic files, including computer and network security. The operation should undertake to protect the cultural heritage information from misuse, loss, and unauthorised access, modification or disclosure. Where appropriate, the operation should also provide for access by the community to the stored data.

11. Examples of cultural heritage related work and initiatives for inclusion in sustainable development reports:

- incidents;
- outcomes of cultural programmes;
- training of local employees in cultural heritage related work;
- interesting outcomes from archaeological survey work, management and protection outcomes;
- measures taken to conserve industrial heritage associated with the site; and
- cultural induction programmes.

5. Global Reporting Initiative in the Mining Metals Sector Supplement - <http://www.globalreporting.org/ReportingFramework/SectorSupplements/MiningAndMetals/>

2.5.2 Internal reporting

Incident reporting

Incidents in which cultural heritage is damaged must be reported internally through SEART or the Business Solution. Reports that document the incident and steps taken to remedy the incident are important pieces of information that should be revisited regularly and shared with other business units to ensure that individual operations and the Rio Tinto Group learn from our mistakes.

Communities SMAs

Outcomes from Communities SMAs will be reported in a 'close-out' report presented to the operation's managing director and the operation's response sought. The final report is signed off by the managing director for presentation to the product group chief executive and Communities global practice leader. Consideration should also be given to distributing the final report, or summary, to participants and whether to circulate the report more widely.

Community Workbook

Our businesses report their community contributions and programmes annually to Rio Tinto in the Community Workbook. At the end of each calendar year, Rio Tinto gathers data group-wide across a range of economic, environmental and social indicators. Operations will be required to report progress on local cultural heritage targets as part of the global Communities target through the Community Workbook mechanism.

2.5.3 Communicate

Communicating about cultural heritage issues with local communities and stakeholders is an integral part of inclusive engagement. Communication will largely focus on heritage values and disturbances, outcomes and plans.

Communicating heritage values

Communication of the operation's cultural heritage management to the general public and employees and contractors can have a number of benefits. These benefits include raising wider awareness of the cultural heritage of the area and enhancing the operation's reputation. This broader communication needs to be undertaken with careful consideration and consultation

with the custodians of the heritage to ensure that their intellectual property rights and privacy are always respected. This communication can be part of internal and external communications work, maintenance and celebration programmes, and employee cultural induction programmes.

With the consent of the local community, it can also include the development of interpretative signage to increase public knowledge about the value of the heritage place and to communicate stipulations that ensure respectful use of the site (see box 3 and case study 1). Interpretive signage should be developed in close

consultation with the people to whom the place or object holds value to ensure that any use of images or words is culturally appropriate and sensitive, and should only publicise cultural heritage features that the community approve of. It is particularly important that this kind of communication is conducted in line with cultural norms and restrictions over the dissemination of knowledge.

The archaeological, anthropological, palaeontological and other research documented in heritage survey reports by an operation may contribute significantly to academic research in the field, as well as being of interest to the local

community. Numerous cultural heritage publications and conference papers have been published and/or supported by Rio Tinto operations, especially collaborations between their employees, community members and consultants. These reports are a positive way in which an operation can meet its obligations regarding transmitting heritage information to the wider public. Experiences from one operation can also aid other Rio Tinto operations to improve their own management outcomes. For example, information on rock shelter stability relative to vibration caused by drilling and blasting has improved the way Rio Tinto Iron Ore manages rock shelters in the Pilbara. This information may be of value to other operations within the Rio Tinto Group.

Another form of communicating heritage values includes the development of museums, cultural or visitor's centres, and other activities that make heritage accessible, interactive and educative for the general public. Often the operation's own historical assets can be managed in this way. Case study 12 from the Bingham Canyon Mine Visitors Center is an example of communicating the historic industrial heritage value of the mine and informing people about current operations, thereby strengthening the operation's social licence to operate.

Disturbances, outcomes and plans

Rio Tinto businesses should consult regularly with communities to find out what information the community wants to know about or, in respect of the maintenance of cultural heritage, shared with others. Communities should be kept informed about new project work (including all ground disturbance work and new environmental procedures) and any potential impacts on cultural heritage. It is also important we communicate the outcomes of audits or reviews, so that the community is aware of what is going on inside the company with regard to their cultural heritage. Significant incidents must be reported to the relevant parties – this is often a legal stipulation and included in cultural heritage management plans and agreements. Actions taken to mitigate the impact and the outcomes of these actions should be communicated in a timely fashion.

Case study 13 from the Argyle diamond mine in Australia outlines the importance of building trust with the local community through open and transparent communication. Through Argyle's new engagement strategy they have been able to repair a historically damaged relationship between the operation and their landlords – the Traditional Owners of the area.



Utah

 US

Case study 12: Rio Tinto in Utah, US

Promoting industrial heritage values of an operating mine

Kennecott Utah Copper (KUC), which is 100 percent owned by Rio Tinto, operates the Bingham Canyon Mine, the world's first and largest open-pit copper mine. Mining commenced in Bingham Canyon in 1863 and surface mining, now called open pit mining, began in 1906. At one point some 15,000 people from a wide range of ethnic backgrounds were living in the larger Bingham Canyon mining district. In 1966, the Bingham Canyon Mine was named a National Historic Landmark of the United States. Located just southwest of Salt Lake City, Utah, the operation has had a large impact on regional economic development of the area and continues to have a very visible presence in the metropolitan community.

Challenge: Maintaining social licence while expanding operations

The challenge for this mine is to continue to operate, including plans to expand underground, while being located immediately next to the suburbs of a major metropolitan area. Preserving the on-going social licence to operate in this case is critical. One initiative to maintain and enhance a strong relationship with the adjacent communities has been to promote the positive impact of the operation on the region's history and development through the construction of the Bingham Canyon Mine Visitors Center. The Visitors Center also contributes financially to local charities, further strengthening the operations's social licence to operate.

Process: Promote industrial heritage values and local history

To honour and promote its industrial heritage, KUC opened its Bingham Canyon Mine Visitors Center in 1992. It is located at a point overlooking the Bingham Canyon Mine so that visitors can observe day-to-day mining operations. It has hosted almost three million visitors and has donated more than US\$2.4 million to local charities and non-profit organisations through the Kennecott Utah Copper Visitors Center Charitable Foundation.

Visitors can listen to educational narratives explaining the operations, in several languages, at the Visitors Center overlook. There are also numerous interactive exhibits such as 3-D microscopes for visitors to examine mineral samples and displays showing how copper is used in everyday life, educating the public on the importance of metals and mining as an industry. The Center also maintains a rich collection of old mining equipment, artefacts, documents and displays showcasing the evolution of mining technology

up to modern day environmental engineering.

The Visitors Center was recently remodelled and over the years has undergone several expansions and upgrades that included new exhibits and videos. One display called "Local Memories" exhibits historical artefacts from the community, including photographs and an oral history DVD which is a collection of stories by and for the people of Copperton, Utah. Copperton is a company town built in 1927 by KUC's predecessor, Utah Copper Company. Through historic photographs, the Center displays the culturally diverse mix of early settlers in the mining community.

The Bingham Canyon Mine Visitors Center is not just a place for KUC to promote and educate others about its operations and about mining as an industry. It is also a place where the history and development of the surrounding community can be heard, shared and maintained.



Outcome: A stronger social licence

The Visitors Center contributes to a sense of community by promoting and communicating the industrial heritage values that were recognised in the listing of Bingham Canyon as a National Historic Monument and passing down the extensive history of the mining industry in the area. Communicating these values to visitors emphasises the connections between the heritage of the mine and the community and the inseparable relationship of industrial and community heritage in the region. These actions, as well as the donation of visitors' fees to local charities, help strengthen the mine's social licence in turn allowing it to continue operating in a highly populated metropolitan environment.

12



Top
During World War II, Kennecott Utah Copper relied heavily on women to operate the mine to provide one-third of the copper used by the allies for the war effort. This picture is from 1944.

Above left
The Visitors Center plaza and Bingham Canyon Mine overlook, 2010. This display features historic mining equipment used in the early days of the Bingham Canyon Mine. The Bingham Canyon Mine is in the background.

Bottom left
Inside the Bingham Canyon Mine Visitors Center, 2010. The Visitors Center features interactive, informational and historical displays on the history, operation, and sustainability of the Bingham Canyon Mine, Kennecott Utah Copper and Rio Tinto.

Circle
Employees work on rail maintenance for the locomotives that hauled the ore and overburden from the Bingham Canyon Mine. This picture is from the late 1940s.



East Kimberley
Australia

Case study 13: Rio Tinto in the East Kimberley, Australia

Open and transparent communication at Argyle Diamonds

Argyle diamond mine (Argyle) is one of the world's largest diamond mines and is 100 per cent owned and managed by Rio Tinto. Located in the East Kimberley region of Western Australia, Argyle is mining Barramundi Gap. Barramundi Gap is a cultural landscape associated with the Ngarranggarni Dreaming – a creation story that tells of how the area's geography was formed. Barramundi Gap is one of the most culturally significant sites belonging to the Miriuwung and Gidja people.

Challenge: Building better relationships to continue operating in a significant cultural landscape

The history of Argyle's engagement with Traditional Owners of the mine lease area has been long and difficult. From exploration in the 1970s through to the first stages of operation in the mid 1980s, Argyle's relationship with Traditional Owners was characterised by resentment and limited regional contribution. A change in Rio Tinto leadership in 1999 prompted a 'cultural shift'. The company started working towards gaining the support of Traditional Owners by, among other things, implementing open and transparent communication processes around the mine's impact in this cultural landscape.

Process: Establish formal communication strategies

To overcome the problems of the past and to appropriately manage this culturally significant landscape into the future, Argyle needed to establish formal communication strategies. The Argyle Participation Agreement, signed in 2004, is the mechanism through which these communication processes are formalised and appropriate cultural heritage protection, as discussed in community forums, is ensured.

Key mechanisms that facilitate open and respectful dialogue between Traditional Owners and operations around cultural heritage (and other) issues at Argyle include:

The Relationship Committee:

This consists of Traditional Owners and Argyle representatives, and meets quarterly to discuss the eight management plans that make up the Argyle Participation Agreement, including sites of significance and water and land management. Regular meetings ensure all major new work on the operation and any concerns that Traditional Owners might have are discussed openly between the operational staff and the Traditional Owners. This ensures that appropriate measures are implemented to manage cultural heritage issues including the overall management of the cultural landscape itself.



Two-way communication in land clearance processes:

In accordance with the Argyle Participation Agreement, every land clearance is conducted in partnership with Traditional Owners, ethnographers, archaeologists and subject matter experts. Argyle Diamonds has encouraged this broader involvement as it ensures that the right decisions are made and that mining activities and cultural heritage aspects are communicated widely in the Miriuwung and Gidja communities.

Traditional Owner Open Day:

Traditional Owner Open Day is held on site annually. Traditional Owners are given the opportunity to visit and discuss any part of the mine where cultural heritage issues exist. This may include visits to caves, the underground project, rehabilitation sites and/or key water sources including springs and dams. The Open Day is an opportunity for both employees and Traditional Owners to view together, and further discuss, the work of the Relationship Committee.

Manthe welcome ceremony:

Protocol at Argyle now states that mine operators must be welcomed onto the mine site by Traditional Owners through a Manthe ceremony. The ceremonies confer safe passage of employees through the traditional lands and are a formal component of the site's Health and Safety induction. They are conducted fortnightly ensuring all new employees are welcomed by Traditional Owners, remain safe on the operation and are inducted into the cultural significance of the site.

Protocol for using Miriuwung and Gidja intellectual property:

Argyle's cultural heritage management system outlines procedures for the use of photographs depicting Miriuwung and Gidja people, their artwork, stories, songs and language in the operation's promotional or other materials. This ensures that the reproduction of such intellectual property is culturally sensitive and is not used disrespectfully.

Outcome: Improved community relationships

Creating formal mechanisms to encourage continual communication between employees and Traditional Owners has broadened the operation's understanding of cultural issues, allowed for a closer working relationship and further enriched Argyle's understanding of the affected community's concerns. By formalising a communication strategy, Argyle was able to overcome past issues and forge strong, cooperative ties with the community while continuing to mine in a culturally significant place. Argyle maintains an enthusiasm and openness for greater communication and exchange of ideas between employees and Traditional Owners.

13

Top
Peggy Patrick, Gija Traditional Owner, explains the importance of the Manthe welcome ceremony to a group of employees and contractors.

Circle
A special Manthe welcome ceremony is held at the entrance to the underground project at Argyle diamond mine.

2.6 Summary

Managing cultural heritage can be difficult and often presents unfamiliar challenges, however, we believe that proactive engagement with local communities on cultural heritage issues is not only likely to deliver real benefit to them, but also to protect and enhance the value of Rio Tinto businesses.

Inclusive engagement

Our primary goal is to engage inclusively. It means recognising the socioeconomic and political diversity of the various groups which comprise a community. We also undertake to engage others in our own business and in the external community to ensure due respect and effective cultural heritage management.

Know and understand

From the very outset, we should seek to build our knowledge and understanding of:

- places, objects, landscapes, ecosystems and practices that are important to communities;
- why these things are valued;
- how they should be managed; and
- the potential for our activities to impact on any of the above, positively or negatively.

Gaining the knowledge and understanding that is needed to develop a cultural heritage management system takes time and should be ongoing as the community's concerns change over time and as new developments and processes emerge.

Plan and implement

Once we understand more about the places, objects and practices that are important to communities, as well as the potential for our activities to impact on these, we should plan to avoid or mitigate adverse impacts and look for opportunities to maximise the benefits. This can be through CHMPs, communities plans, programme-level plans and in other types of operational policies, plans and activities.

Monitor, evaluate and improve

Systematic tracking of how we are performing and assessment of whether we have met stated targets assists the business and the community to achieve their agreed cultural heritage management goals. Accurate data is essential to the measurement of change, positive and negative. This depends on good engagement and consultation, which is at the heart of effective cultural heritage management. Where possible, monitoring and evaluation processes should be participatory and inclusive of employees, heritage experts and the community custodians of the heritage.

Report and communicate

Reporting and communicating performance, including on cultural heritage, is important for internal and external transparency and as a way to invite feedback and foster dialogue. This will help guide our formal and informal decision-making processes, which will in turn contribute to better social performance and more worthwhile contributions. We can also communicate, in a culturally-sensitive way, the cultural values of a place, object or practice to the wider public, both to help safeguard cultural heritage and to broaden awareness of its value.

In all our projects and operations, and across all functional areas, we aspire to meet the challenge of integrating cultural heritage management. The skill and sensitivity with which we manage cultural heritage issues will help define the quality of Rio Tinto's relationships with the communities where we work or may wish to work in the future.

3. Background reader

3.1 Cultural heritage concepts	91
3.2 The business case	100
3.3 Impacts on cultural heritage	104
3.4 International protocols and standards for protecting cultural heritage and diversity	109

What is covered in the background reader?

The background reader helps practitioners to deepen their knowledge and understanding of cultural heritage issues in relation to operational activities, associated infrastructure and the broader social and ecological changes that large developments can bring to regions and the communities they affect. It offers additional detail to the “How to” section of this guide.

Cultural heritage concepts

This section:

- defines cultural heritage and types of cultural heritage;
- describes the importance of cultural heritage management and significance assessment;
- explores the complexity of making distinctions between tangible and intangible values as well as different types of heritage;
- describes some threats to cultural heritage; and
- highlights some of the debates in heritage literature.

The business case – valuing cultural heritage

This section presents reasons why Rio Tinto wishes to ensure thorough and legitimate cultural heritage management. It outlines both business threats and opportunities, and highlights that cultural heritage management can:

- minimise the negative impacts of operational activities;
- help an operation to gain and maintain a social licence to operate;
- advance our sustainable development objectives; and
- uphold our commitment to human rights.

Impacts of mining and processing on cultural heritage

This section explains the positive and negative impacts to a community’s tangible and intangible heritage that can result from operational activities. It discusses impacts in relation to:

- negotiation and engagement;
- direct and indirect impacts; and
- employment and training.

International protocols for protecting cultural heritage

This section outlines important documents that influence best practice in cultural heritage management and inform Rio Tinto’s cultural heritage management policy. These include:

- international protocols and conventions;
- sustainable development frameworks; and
- industry principles and frameworks.

3.1 Cultural heritage concepts

The “How to” section of this guide covered some of the key concepts associated with cultural heritage and mining and processing operations. This section provides additional detail on the following issues and draws on key theoretical debates and literature:

- cultural heritage and types of cultural heritage;
- cultural heritage management;
- assessing significance;
- cultural heritage and cultural diversity;
- the convergence of tangible and intangible values;
- distinctions between natural and cultural heritage;
- threats to cultural heritage; and
- debating cultural heritage.

Cultural heritage

Cultural heritage is any aspect of a community’s past and present that it holds to be important and desires to pass on to future generations. It can be tangible (physical) consisting of things like buildings, landscapes and artefacts or intangible (non-physical), such as cultural practices and beliefs, language, dance and music. Cultural heritage is often described as objects, places or practices which have been handed down by tradition or which have some link to history. It is not always about old things. New, or newly altered, objects, places and practices can hold cultural value for current generations and therefore have the potential to become components of cultural heritage.

Cultural heritage is important for everyone. In some countries it is associated with indigenous or traditional peoples more often than other groups. However, places, objects and practices of cultural importance enrich the lives of all people by providing deep and inspirational connections to places, nation states and/or cultural or ethnic groups. It provides links to the historic past and to lived experiences and is, therefore, a key element of individual and group identity for all people.

Types of cultural heritage

The list in box 12, although not exhaustive, provides a sense of the breadth of cultural heritage. There are many ways to classify different types of heritage. Throughout this guide we refer mainly to places, objects and practices of cultural significance, also collectively referred to as cultural heritage features, and the following list is organised accordingly. Most of these types of heritage have both intangible and tangible values. Landscapes, for instance, bear the evidence of the past and the present but it is people’s memories and associated histories that define the significance of these places.

12. Types of cultural heritage

Cultural heritage places

- Archaeological sites
- Historic cities and ruins
- Urban landscapes and their constituent parts
- Parks, gardens and other modified landscapes such as pastoral lands/farms
- Associative landscapes (places that people revere but that may not have any evidence of human modification)
- Industrial landscapes and their constituent parts
- Palaeontological features
- Underwater heritage such as shipwrecks
- Museums and galleries of all kinds

Cultural heritage objects

- Natural resources with tangible and intangible value
- Movable cultural heritage (objects such as paintings, vehicles, clothing, stone tools and others)
- Documentary and digital heritage (archives and objects in libraries)
- Cinematographic heritage and the ideas they convey
- Literature

Cultural practices

- Oral traditions passed between generations
- Languages
- Festive events and the traditions they embody
- Rituals, traditions, beliefs and customs
- Local or traditional practices in and knowledge of the natural environment
- Traditional land management practices and hunting/farming techniques
- Traditional medicine
- Music and song and other performing arts
- Culinary traditions
- Sports and games

13. Different scales of significance

Heritage may hold different significance at different levels, whether these are local, regional, national or global. It is important that these sometimes contrasting values do not diminish the ability of local community members to define the use and management of their cultural heritage.

For example, indigenous Hawaiian organisations petitioned against the World Heritage designation of the Northwest Hawaiian Islands Marine Monument, as the nomination would have prevented them from practicing their traditional subsistence fishing practices in the area. The indigenous Hawaiian groups also argued that the lack of consultation and other general exclusionary processes are a breach of State Constitutional Law. Although UNESCO's World Heritage list often holds great influence over heritage management options and on-the-ground legislation, it can conflict with local community/indigenous aims and concerns and should not be considered the definitive answer to cultural heritage management.

Cultural heritage management

We define cultural heritage management as the actions taken by managers to identify, assess, decide and enact decisions regarding cultural heritage. In essence it is about managing change. The reason we undertake cultural heritage management is to actively protect culturally significant places, objects and practices in relation to the changes they face over time. These changes may be caused directly or indirectly by operational activities – or they may result from natural or cultural processes. Management does not mean preventing change from occurring.

Cultural heritage management may result in the documentation, conservation, alteration or even loss of cultural heritage. It can also include working with communities to protect and enhance their culture and its practices. Effective cultural heritage management aims to lessen both direct and indirect negative impacts and to enhance the positive impacts of a development or other land use change on cultural heritage features and people.

Decisions about the management of cultural heritage should always be made in consultation with relevant communities, heritage experts and stakeholders. They must also be in line with the relevant heritage legislation which may require specific conservation, mitigation or safeguarding measures. Sound management decisions also require clear articulation of the reasons why and to whom a place, object or practice is valuable, as not all things are equally valued or equally in need of protection.

In making this assessment, it is important to be aware that some aspects of heritage may embody various values which may hold different significance for different groups. Likewise, heritage may be valued at a global, national or local level, or from several points of view (see box 13). This is why broad consultation with a diverse range of relevant community members and stakeholders is essential to identify the value and significance of cultural heritage. It can sometimes be difficult to decide who constitutes 'relevant community' and considerations about gender, age, ethnicity, religious affiliation and class must all be addressed to ensure that the values of these different groups are captured. The "How to" section of this guide and the Rio Tinto Consultation and engagement guidance describe what broad ranging consultation should look like.

Assessing significance

One way to determine the value of cultural heritage is through the assessment of cultural significance. The term significance is used in heritage management to mean the aesthetic, historic, scientific or social value of a place, object or practice for past, present or future generations. In other words, why a cultural heritage feature is important to a group of people.

Aesthetic value refers to heritage that is valued for its pleasing or unique form, scale or design or for the sensory experience that it provides (ie: visual or olfactory sensation). While aesthetic value can be associated with architectural and artistic significance, it can also be constituted by natural

14. The Cradle of Humankind World Heritage Site

The Cradle of Humankind is a World Heritage Site listed by UNESCO in 1999. It is in South Africa's Gauteng province, about 50km northwest of Johannesburg.

The name, Cradle of Humankind, reflects the fact that the site has produced a large number of hominid fossils, including some dating back as far as 3.5 million years ago, making them the oldest ever found. The archaeology here has contributed to current understanding of human evolution. It is therefore deemed to be of exceptional scientific value.

phenomena or non-physical and intangible attributes. A view of the English countryside featuring rolling pastures and stone walls, for example, may be valued for aesthetic reasons because it represents a certain style of landscape that is equated with a place.

This does not mean that heritage has to be "pretty". Industrial landscapes or industrial sites such as the Battersea Power Station on the River Thames in London are valued as heritage despite their unattractiveness (or even because of it). Of course beauty is in the eye of the beholder and is not universally defined. In all instances the value of a place, object or practice must be defined by those for whom it holds importance and the values should not be measured relative to each other.

Historical significance refers to the history of society evident in a cultural heritage feature. For instance, a place or object may be valued based on its association with a famous person or with a significant event such as a battle. More recently, places have also been assessed in terms of their relation to historical themes such as the development of specific industries or struggles for land rights or independence. An example of this is the Black Heritage Trail in Boston, which

links more than 15 pre-Civil War structures and historic sites.

A cultural heritage place, object or practice may have scientific or research significance if it provides information of value for historic, prehistoric or environmental research (see Box 14). Scientific significance relates to the evidence a site holds and therefore its ability to answer questions about the past and is most often associated with archaeological significance. Scientific significance can be based on the contribution that a cultural heritage feature can make to our understanding of early human practices and settlements, past environments, or historical occupations of countries.

Social value refers to the qualities for which a cultural place, object or practice has become the focus of spiritual, political, national or other cultural sentiment. Most definitions of social value refer to the way that cultural heritage may be important to a community's identity due to its traditional, historic or contemporary associations. While social significance often refers to a "sense of place" this sense can include aesthetic, historical and scientific values. Although a cultural heritage feature may be valued for spiritual reasons, its aesthetic qualities, historical association or potential to answer

15. Social value, Khanbogd region of Mongolia

The Javkhlant Mountain in the Khanbogd region of Mongolia is considered a spiritual place upon which women should not walk. To an outsider the mountain does not look different to any other mountain, yet to the local people it holds significant social value in the form of spiritual and cultural associations.

16. Conflict between tangible and intangible values

Though managing tangible and intangible values is an important process, the protection of a cultural heritage feature's tangible elements may sometimes conflict with the associated intangible value.

Domboshava is a granite rock shelter containing Late Stone Age rock art located outside Harare, Zimbabwe. Conflict between heritage managers and local people over the management of Domboshava highlights the tensions that can arise if the tangible qualities of heritage sites are managed in isolation from the intangible practices and beliefs that are associated with these sites.

Until recently heritage managers were only interested in the management of the rock-art site itself. For local people, however, Domboshava is a rainmaking shrine. The rock art, although important to local people, is of lesser interest in isolation from the rainmaking ceremonies held inside the rock shelter. These ceremonies provide the context of the art and define the art's significance.

Despite this, the practice of rainmaking ceremonies at Domboshava was banned as the ceremonies involved lighting fires under the rock-art panels. Smoke from the fires was considered detrimental to the preservation of the rock art.

These actions resulted in local outrage and eventually an act of vandalism in which the rock art was covered over by oil paint. This act of destruction highlights the political aspects of cultural heritage management and the need to encourage the continuation of the intangible practices that give cultural heritage meaning.

Adapted from Ndoro, 2003:82

scientific questions can also contribute to the attachment that people feel for it. This is why some cultural heritage experts talk about social values as encompassing other categories of significance which differ according to social groupings such as gender, ethnicity and class. Social value is often associated with values defined by a minority or other specific social group as distinct from values such as architectural or archaeological, which are often deemed to have significance for a nation or all of humanity (see box 15).

Social values were first considered an element of significance assessment in the Australian Heritage Commission Act 1975 (based on US precedents), and the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (1979), known as the Burra Charter. The 1999 revision of the Burra Charter gave greater prominence to the concept and stressed that social values differ between and within groups and that consultation with concerned groups is needed to establish the social values of places and objects. This opened up the range of meanings attributable to tangible heritage and requested that heritage professionals include

community understandings of the value of place in any assessment (intangible aspects).

Cultural heritage and cultural diversity

Society is made up of different groups defined, for example, by gender, class, ethnicity, age or religion. Value systems differ between and within such groups, meaning that the same places, objects and practices may be valued differently by different people. Sometimes these value systems conflict with one another over cultural heritage significance, as when an invading army deliberately or accidentally destroys cultural icons belonging to the invaded people.

Because cultural heritage is so important to group identity, people have the right to define and make decisions about their own cultural heritage. This means that what cultural heritage "looks like", why it is significant and how it should be looked after, must be defined primarily by the people for whom that cultural heritage is important. This is recognised as especially important on traditional lands belonging to indigenous peoples.

The need to involve community members in management can be confusing for operations managers. Cultural heritage is often mistakenly thought of as 'old' and traditional customs are often thought of as 'remnants of the ancient past' rather than living beliefs and practices that help make up the identity of the people concerned.

Cultural values are not frozen in time. The types of places, objects and practices that people value,

and the reasons for which they are valued, differ through time in line with changes in the meaning(s) that the current living population ascribes to them. In some cases, the value of certain cultural heritage can be lessened when knowledge is lost or not transferred between generations and new values, practices and beliefs can arise with the passage of time and changing circumstances. The notion of authenticity, which is so important in cultural heritage, can mistakenly be used to imply that newer cultural beliefs/practices are inauthentic or “made up”. It is important to stress that there is no necessary link between age or authenticity and significance. For instance, many Pacific Islanders have recently embraced reggae music (originally Jamaican in origin) as a form of cultural expression and, in doing so, have created a Pacific island style of reggae that has become synonymous with their cultural lifestyle.

Despite the fact that new forms of cultural expression and new objects and places can be considered cultural heritage, some distinction needs to be made between things valued for their cultural significance as opposed to other important assets valued by a community which do not possess cultural heritage value per se, such as good roads and new public buildings, facilities and infrastructure.

The convergence of tangible and intangible values

In professional heritage work, the focus has shifted from a “stones and bones” or object-based approach, concerning just the physical or material aspects of cultural heritage. There is now a place-based focus in which

17. Marine mammals as invaluable Inuit cultural heritage

A recent decision has been made to suspend seismic testing of an Arctic sound due to Inuit concerns over the impact on the marine mammals that they hunt for food and other resources, which are also important for cultural and spiritual reasons. The Nunavut court judgement made on 8 August, 2010 is considered to concern the protection of Inuit cultural heritage rather than just safeguarding an Inuit food source.

The judge reportedly stated that:

“If the testing proceeds as planned and marine mammals are impacted as Inuit say they will be, the harm to Inuit in the affected communities will be significant and irreversible...The loss extends not just to the loss of a food source, but to loss of a culture. No amount of money can compensate for such loss.”

place is taken to mean sites, areas, land, landscapes, buildings and other works and, potentially, the components, contents, spaces, outlooks and even the sounds associated with these places.

More recently, heritage guidelines have incorporated the management of intangible components of cultural diversity and cultural practices including language, art, music, customs and traditional ecological knowledge and subsistence practices such as hunting. These changes recognise that tangible objects, such as buildings, contain no necessary cultural value in and of themselves. Rather, they are assigned value based on the intangible elements that give them context and meaning. These factors are often based on how contemporary people use the cultural object or place. As such, sometimes the management of cultural heritage is implemented through traditional methods as opposed to a more contemporary style of management.

Managing the intangible values of tangible heritage can be difficult and will often require considerable negotiation between heritage professionals and the concerned community to establish

which practices are integral to the meaning of the cultural place and to ensure that other inappropriate activities are limited (see box 16).

Similarly, cultural practices such as ritual and ceremonies may include both moveable physical objects, such as ceremonial objects and dress, as well as intangible performances of song and dance.

The management of intangible heritage is complicated. UNESCO proposes “safeguarding” intangible heritage rather than “preserving” it. This is because preservation could be interpreted as “freezing” cultural practices in time rather than allowing cultural practices to adapt and change as necessary, as would normally occur.

It is important that safeguarding measures add to or strengthen and reinforce the diverse and varied circumstances (both tangible and intangible) that are necessary for the continuous evolution, interpretation and transmission of intangible cultural heritage for future generations (see box 17).

18. Cultural landscapes

Cultural landscapes show the combined work of nature and humanity and can include landscapes such as parks and gardens, naturally-evolved landscapes and associative landscapes. Associative landscapes are those that hold spiritual or other significance that is not necessarily visible.

Cultural landscapes could include streetscapes, parts of the settled countryside, abandoned quarries and mine sites, or landscapes that are held to have spiritual significance because they embody aspects of creation stories such as Aboriginal dreaming stories or Biblical references. Often cultural landscapes can hold different values to more than one group. Sometimes these values may conflict. Impacts on cultural landscapes affect people's emotional and cultural wellbeing as well as their lifestyle and economic sustainability. This can be relevant to both indigenous and non-indigenous communities (such as farming communities).

The World Heritage List officially recognises cultural landscapes as places of both natural and cultural value. Sites such as Tongariro in New Zealand were originally listed just for their natural values but have since had their listing extended to include cultural values.

Distinctions between “natural” and “cultural” heritage

To facilitate management decisions, statutory regulations and voluntary global heritage guidelines often define certain types of cultural heritage and provide frameworks for assessing their authenticity and significance. Many of these frameworks have been criticised by heritage professionals, academics and indigenous groups for favouring “universal” ideals and values over minority understandings, for ignoring the intangible aspects of heritage, and for perpetuating false distinctions such as those between natural and cultural heritage or between tangible and intangible values.

Natural heritage features are seen as elements of the natural environment that people value, use, modify and enjoy and thus seek to manage, conserve or exploit. Natural heritage is valued for its aesthetic qualities, its contribution to the ecological processes which occur in natural systems and for the conservation

of biodiversity. Cultural heritage, on the other hand, often implies human modification and usage of the natural environment.

The distinction between natural and cultural heritage is not clear-cut. Natural landscapes are highly significant to many cultural groups. This fact is often discussed in relation to the heritage type known as cultural landscapes (see box 18). Natural resources are also critical aspects of many cultural practices and knowledge systems. Most traditional/indigenous cultures see the land and many species of plant and animal as sentient, as possessing culture, knowledge and direct kinship links to the human and ancestral occupants of the land.

In relation to the biological environment, concepts such as “natural” and “wilderness” have themselves been critiqued as “make believe”. These critiques are based on the fact that most of the world's surface has been modified by human action and the majority of “natural” ecosystems are in

fact the products of these actions over thousands of years. As such “natural” environments are very often cultural environments too.

Managing natural heritage by, for example, conserving biodiversity and managing the impacts of weeds and feral animals, can have positive cultural heritage outcomes. For some indigenous groups, the practice of managing natural resources (through hunting or the use of fire) can also be seen as an element of the cultural heritage of that group. At the same time, traditional environmental knowledge of plant and animal species can contribute to mined-land rehabilitation and other forms of environmental management.

The Secretariat of the Convention on Biological Diversity have developed the *Akwé: Kon Voluntary Guidelines for the Conduct of Cultural, Environmental and Social Impact Assessment regarding Developments Proposed to Take Place on, or which are Likely to Impact on, Sacred Sites and on Lands and Waters Traditionally Occupied or Used by Indigenous and Local Communities* (2004) (see International protocols section of this guide). These voluntary guidelines provide advice on how to include traditional knowledge, innovations and practices as part of impact assessment processes.

Threats to cultural heritage

Sound cultural heritage management recognises that cultural heritage is constantly susceptible to change and needs conscious decisions to manage those changes.

Examples of the changes that cultural heritage may face include:

- Natural and cultural causes of decay: Natural decay refers to the deterioration of a place or object through time due to natural processes such as biological or chemical weathering, the action of water and wind, or the actions of animals and plants. Cultural causes of decay can stem from neglect or from continual use of a place or object, producing gradual wear and tear.
- Development pressures and disturbance: Factors such as pollution or ground disturbance related to development for housing, industry, forestry, farming, infrastructure, tourism, transport and mining.
- Climate variables: Factors such as climatic variations, sea level shifts, ground water levels, floods and droughts.
- Looting: Valuable movable heritage may be stolen or sold.
- Intangible impacts/cultural change: Processes of globalisation and economic development or the forced removal of people from their land can speed up processes of cultural change, leading to the loss of traditions, languages and local knowledge systems.
- Cultural disasters: Wars and other civil disturbances often lead to deliberate or inadvertent destruction of cultural heritage.

19. Captain Cook's landing place – significant despite change

Kurnell in Sydney is the site of Captain Cook's initial landing in Australia. The site is considered culturally significant to non-Aboriginal and Aboriginal Australians alike because the event is considered to be one of the defining points of Australian history.

Nowadays the site looks nothing like it did in 1788. Urban development has totally altered the material aspects of the site. However this has not diminished the historic significance of the site or the site's integrity because the significance of the place is not contained in its material aspects.

Nobody knows where Cook actually stepped ashore and there are in fact two plaques both supposedly commemorating exactly where he landed but lying 2km apart.

Adapted from Pearson and Sullivan, 1996:147

- Natural disasters: Fires, earthquakes, storms and floods as well as other natural disasters can adversely impact upon cultural heritage.

These challenges and their consequences are not mutually exclusive but can be interrelated and interdependent. One type can lead to or intensify the consequences of another. For example, tourism often leads to construction and ground disturbances but can also cause increased rates of cultural decay due to greater visitation and use of cultural places. Similarly, development can also increase access to previously remote locations, which may precipitate higher rates of looting.

Threats such as these may lead to the total destruction of cultural heritage or they may degrade the values associated with cultural heritage by diminishing the integrity of a cultural heritage feature, or by denying people access to places or objects (see box 19).

Often the protection afforded to places, objects or practices through cultural heritage legislation or heritage listing

depends on the integrity of the cultural heritage feature. Integrity, as defined by the World Heritage Convention, "is a measure of the wholeness and intactness of the natural and/or cultural heritage and its attributes". Examining the conditions of integrity requires assessing the extent to which the cultural place, object or practice:

- includes all elements necessary to express its value;
- is of adequate size to ensure the complete representation of the features and processes which convey the property's significance; and
- suffers from adverse effects of development and/or neglect.

Decisions not to conserve elements of cultural heritage are sometimes based on the perceived lack of integrity or authenticity of a place, object or practice.

It is important that assessments of integrity do not focus solely on the physical state of an object or place or on an assumption that something is only authentic if it is old or physically intact. Damaged or degraded things, and recently-created or altered places, objects or practices, are often considered highly significant.

Debating cultural heritage

There are lively ongoing debates in academia, the community and among cultural heritage professionals surrounding the definition of heritage, its value, who has the rights to heritage and the ethics of heritage management.

The history of heritage studies has been dominated by Western (and especially Anglo-American) ideas of what constitutes heritage. Western, more materialistic values, have now become enshrined in global heritage guidelines such as those produced by UNESCO and ICOMOS. These guidelines in turn inform heritage statutes that outline definitions of cultural heritage and, in essence, describe what is thought of as “Official Heritage” (see Smith, 2006). These framing guidelines have been criticised as discriminating against local communities and minority groups by preventing them from defining and protecting the types of heritage that are important to them in ways that they deem appropriate.

Heated disputes often arise due to conflict between “scientific” and “traditional” values, an example being disputes over the study, or reburial, of human skeletal remains. These debates have caused a distinction to be made between historical or industrial heritage and indigenous heritage in some former colonial countries and how these heritages should be managed.

It must be recognised that official heritage concepts and guidelines are constantly evolving in response to such criticism and in accordance with advances in heritage work undertaken

in many parts of the world. Recently, many different types of heritage have begun to be recognised and protected by organisations such as UNESCO and ICOMOS. Consequently many companies are further evolving the concept of heritage by conducting cultural heritage work based on community values and social values which do not separate tangible and intangible heritage. Collaborative management approaches, in which scientific or research values and the interests and concerns of traditional communities are combined, are gaining favour in countries where professional ethics encourages the inclusion of indigenous or minority values in heritage management.

Despite this evolution, debate will continue over who has the right to make management decisions about cultural heritage. Collaborative approaches are still uncommon in many countries, especially if there is no law to protect local community, indigenous or minority values and to recognise the moral, intellectual and property rights of these groups to own and “speak” for their cultural heritage.

Debates over ownership and management of cultural heritage have political, legal, economic and social impacts and triggers. The concept of “world heritage”, for instance, implies that the heritage in question is owned, at least culturally, by the world community. Many indigenous people and other local communities around the world have expressed concern about this situation, as world heritage listing enforces certain management approaches to

ensure protection in perpetuity. These management decisions may conflict with local ideas about the appropriate management or use of places and objects and with local economic initiatives, practices and development projects.

Similarly cultural heritage has been used to symbolically assert national identities and to simultaneously deny the legitimacy of identities that conflict with national ideals. However the example of the Brixton Walking Tour (see box 20) illustrates how heritage can be a form of social action in which minority groups can contradict ideas of official heritage and commemorate and contextualise their own unique connections to the past and present.

The debate over “who owns the past” and who has the moral as well as the legal authority to make decisions about the future of cultural heritage is particularly strong in countries with colonial histories but can also happen at a sub-national scale as different religious, ethnic and class groups attempt to assert their unique rights to heritage over other groups.

Differences may also arise between genders, age groups and even within families. For example, what is considered sacred or significant for women, who may not possess an authority to speak out in their community, may vary greatly from what is considered significant for men. Even in dealing with a cultural heritage element of communal significance, groups within a community, such as elders and or young people, may have differing opinions about how to best manage them.

Due to the variety of pertinent and often conflicting interests, consultation and engagement should aim to capture all relevant perspectives. Engaging with groups within a community separately and sensitively will ensure thorough cultural heritage understanding and also avoid infringing upon local social dynamics and customs.

Box 21 highlights some specific areas of contention that may need to be considered in cultural heritage management.

20. Brixton Walking Tour – commemorating London’s African-Caribbean history

London’s mainstream heritage consists of monuments such as Big Ben and Tower Bridge. The Brixton Walking Tour exposes tourists to a part of London’s often overlooked heritage – Britain’s African-Caribbean history and contemporary communities. In doing so it sheds light on the origins and development of one of London’s largest minority communities.

The tour is a sensory experience in which participants are encouraged to listen to and observe the sights and sounds of the community, including its reggae music and Rastafarian culture. Participants are also encouraged to taste traditional West Indian foods and fruit from the local markets.

The tour celebrates the multicultural past of Brixton and in doing so also commemorates and contextualises the 1981 race riots which started initially because of the police targeting of African-Caribbean men in black British communities.

The tour reclaims and celebrates the riots as an important historical event heralding the development of inclusive multicultural policies by the British government and in so doing is an example of cultural heritage promotion as a type of social action. The intent of the walking tour is to make visible an alternative perception of London’s heritage and history.

Adapted from Harrison, 2010:261-272

21. Differing perspectives important to heritage work

Because cultural heritage may mean something different to different groups, the debate surrounding cultural heritage often involves several ongoing contentions. It is important to remember that definitions and distinctions are not absolute and are often in flux.

Below is a short list of a few perspectives to consider when debating cultural heritage:

- local versus national identities;
- community values versus national or universal values;
- national versus international concerns;
- gender differences within communities;
- age based differences within communities;
- class, caste or social hierarchy;
- religious or ethnic differences; and
- economic impact of management options.

3.2 The business case – valuing cultural heritage

Cultural heritage is valued at Rio Tinto because it helps to:

- minimise negative impacts of mining and processing activities on the surrounding community, as part of overall risk management strategy;
- gain and maintain a social licence to operate;
- advance our sustainable development objectives; and
- uphold our commitment to respecting human rights.

Cultural heritage places are a key feature of the landscape and will form a critical component of the planning for most resource development projects. The skill with which cultural heritage issues are managed will affect the quality of the company's relationship with the communities where it works. A good cultural heritage approach provides a foundation of confidence and trust that enables the community and business to work together.

Engagement between companies and communities on cultural heritage is often challenging as well as rewarding and there is no easy formula for "success". Communities are complex and dynamic entities and can react in a variety of ways to businesses' efforts to engage with them in managing their cultural heritage. There is no guarantee that what works in one context will work in another, or that following specific cultural heritage guidance will always produce the desired outcome. Knowledge about effective strategies is still evolving, so it is good to have internal capability and effective systems and processes in place, including the capacity to learn and adapt when circumstances change.

Overall risk management strategy

Sound management of cultural heritage will reduce business threats and enhance opportunities, including improving the reputation of a business and the Rio Tinto Group. Conversely, mishandling of cultural heritage issues can fuel community opposition to a project, lead to delays in obtaining approvals, jeopardise future land access and, potentially, expose a company to prosecution.

Cultural heritage sites are often protected by law, including cultural heritage, mining, environment, planning, land rights and other forms of legislation. Customary law also needs to be considered in relevant contexts such as in African and Pacific Island nations. Managing cultural heritage in accordance with relevant laws and practices is at the heart of good community relations and avoiding potential conflicts. Ineffective cultural heritage management can cause delays to land access and project development, as well as loss of benefits to the local communities.

Cultural heritage issues are often used as a vehicle for communities to express their rights in their relationships and negotiations

with a business. As a result, cultural heritage matters can be highly political, contentious and carry significant risk.

Unauthorised cultural heritage disturbance, whether by legal or community standards, will expose a company to legal action, compliance costs and reputational damage (see box 22). It is also likely to offend local communities and damage relationships. Significant impacts to cultural heritage sites, even where legally authorised, can potentially lead to community and stakeholder outrage (see box 23). Business impacts upon intangible cultural heritage values, especially those of indigenous peoples and in places where communities have had relatively little exposure to industrial development, can also lead to significant threats to an operation, in particular its on-going social licence to operate. International cultural heritage and indigenous NGOs are increasingly challenging the resource industry on its impacts and performance and influencing the cultural heritage standards of multilateral agencies such as the IFC, which are becoming increasingly rigorous.

Gain and maintain a social licence to operate

Rio Tinto believes engaging with communities on cultural heritage issues is essential to maintaining a social licence to operate. Social licence is the general acceptance and approval by a community of a company to begin and continue operating in an area. Social licence to operate is never to be taken for granted and can change over time with shifts in political, economic and stakeholder circumstances. Engagement with the custodians of cultural heritage through all project study and development phases, operations and closure will enable a greater level of mutual involvement and ideally will produce a more robust social licence to operate.

Social licence to operate can be seen as the “canary in the coal mine”, pointing to potential loss of approval to operate even where the law permits it. This is illustrated in box 24 where Vedanta’s downfall was to rely on the false security provided by India’s environmental law.

Demonstrating quality cultural heritage management capability and a successful approach can also be useful for future projects. If our businesses are able to execute proper cultural heritage management in sensitive areas, this can serve as a testament to communities, governments and stakeholders in other sensitive areas, build trust and help position Rio Tinto to successfully negotiate future agreements and gain access to future projects.

22. The legal case

In 2010, a large multinational mining company was fined under Australian law for a breach of cultural heritage legislation. The company carried out a cultural heritage survey in 2008, in conjunction with the local people. The survey found that a ridgeline contained artefacts of importance to the local people. However, later in that same year, workers using a bulldozer to upgrade a road at the base of the ridgeline inadvertently damaged or disturbed cultural heritage objects in the vicinity of the known cultural heritage site.

It was submitted to the court that the workers’ actions amounted to the company breaching its duty of care. The court found that the company had failed to take reasonable measures to ensure that cultural heritage was not harmed and that the company should have had better internal procedures in place to protect the site.

The decision reinforces the importance of companies understanding and complying in practice with their cultural heritage obligations under legislation. Breaches of these obligations are being prosecuted by governments and can result in damage to reputation, loss of trust in dealing with local communities, and the imposition of hefty fines and convictions.

23. Destruction of unique Afghani Buddhist statues

In 2008, a Chinese mining company signed a contract to begin extracting copper from Mes Aynak, possibly the world’s second largest copper deposit, located in Afghanistan. The mining lease includes a 7th century Buddhist monastery, containing more than 100 statues, and seven stupas (tombs that hold relics of saints). Forming part of the famous Silk Road, the monastery can provide information on the origin and history of Buddhism in the area. Impacts to the monastery are especially significant considering that much Buddhist archaeology in the area has already been destroyed by religious zealots.

The company intends to destroy the monastery to make way for the new copper mine. This sparked considerable outrage amongst Afghan and French archaeologists excavating the site, who rallied international support. In December 2010 the Afghanistan Government signed the Mes Aynak Cooperation Agreement which gives archaeologists an additional three years to excavate and remove cultural heritage features from the site.

Adapted from Lawler, 2010

24. Social licence and cultural heritage

In August 2010 India’s Environment Minister blocked UK based Vedanta Resources’ controversial plan to mine bauxite from an open pit mine on Niyamgiri mountain, which is of great spiritual significance to the Dongria Kondh tribe. The mountain is considered to be the home of their god Niyam Raja.

The Dongria Kondh tribe campaigned against the proposed mine, gaining the support of Survival International, an NGO that supports indigenous social movements. Despite having provisional environmental clearance, Vedanta’s performance and future plans were questioned in relation to laws granting rights to local tribal groups.

It is obvious that a social licence to operate was never achieved in this instance, which led to an international campaign against the operation and, eventually, to its premature closure.

25. Improved mine management

Leading practice recognises that cultural heritage protection and promotion serve the business interests of a mining operation. For example, effective site rehabilitation and long-term monitoring managed by traditional land owners, as described in a closure plan, requires the preservation of botanical knowledge and the cultural framework within which it sits. Ethno-botanical knowledge about species diversity can be an important source of information for land rehabilitation especially in relation to the scoping and assessment of valued ecosystem components and in providing descriptions of baseline conditions.

In New Zealand, Maori people have developed a Cultural Health Index which is used to assess the health of streams and waterways. The Cultural Health Index is an example of effective integration of traditional and western perspectives into a monitoring and decision making tool which can then be used to assess environmental impacts and progress towards rehabilitation.

Adapted from Smith, 2008

26. Destruction of cultural property

Human rights may be violated through the destruction of “culture”, for example if cultural property or cultural heritage is destroyed and leads to a loss of group identity. Such acts against cultural property or heritage may, for example, reveal the intent necessary to establish a crime against humanity or genocide.

The destruction of the Stari Most (“The Old Bridge”), in Mostar, Yugoslavia, is an example of the destruction of an emblematic symbol of ethnic importance. The Old Bridge, a symbol of Mostar’s multicultural past, was destroyed by bombardment from a Croatian army tank in 1993 during the Bosnian War. It is said to have had no strategic importance and that the action was more related to the bridge’s symbolic status. Slobodan Praljak, the commander of the Croatian Defence Council, was put on trial for allegedly ordering the destruction of the bridge without proper justification of military necessity, among other charges.

Advance sustainable development objectives

Rio Tinto has long embraced the concept of sustainable development and our businesses seek to embed the concept of sustainability into decision-making processes at all levels of business.

Respect for and enhancement of cultural places, objects and practices can contribute to an operation’s sustainable development outcomes in several ways:

- Cultural heritage is valuable for its own sake and for the contribution it can make to cultural, economic, ecological, social and political development.
- Cultural heritage contributes to the promotion of cultural diversity and intercultural dialogue.
- Cultural knowledge and practices can contribute to sustainable operational activities through, for example, the use of local knowledge in environmental monitoring and restoration.

Partnerships with communities that strengthen the protection and maintenance of cultural heritage are an important way to demonstrate respect for a community’s values. The outcomes of such partnerships can contribute much to the development goals and aspirations of communities (see box 25).

The economic benefits for the community from cultural heritage can arise from programmes that alleviate poverty or unemployment through, for example, the production and sale of cultural products and services and through the tourism potential of local music and dance, archaeological sites and the retelling of oral histories.

There is a substantial body of evidence that the cultural sector is a significant driver of economic development. The cultural sector represents seven per cent of global GDP (UNESCO 2010), and “Culture and Development” is one of the United Nations formal funding programmes aimed at meeting the MDGs. As a major driver for tourism, cultural heritage holds great potential for regional growth, tourist revenue, jobs, skills training and other benefits which will often out-last the life of an operation. The Global Heritage Fund for example, promotes the safeguarding of endangered cultural heritage sites as positive investments in the economic development of an area.

Cultural heritage programmes can also generate income for the community by building small enterprise skills or delivering education and training. Cultural heritage management should be understood as part of a much bigger exercise of community development involving social, economic and environmental elements.

Uphold commitments to cultural heritage human rights

The Universal Declaration of Human Rights declares that every human being has the right to enjoy and develop cultural life and identity (see box 26). Many countries have enshrined these rights in law, providing safeguards for cultural heritage and defining the processes for redress if standards are not met.

Where this is the case, Rio Tinto must comply with the law. Even without specific local laws – for example, in newly-industrialising economies which have less-developed regulatory regimes and service provision than industrialised economies – we should seek to comply with international cultural heritage treaties such as the World Heritage Convention and widely-recognised global standards such as World Bank safeguard policies.

Rio Tinto has made an explicit commitment to support and respect human rights in its operations. Our commitments to cultural heritage and human rights are reflective of our overall philosophy of empowering the communities in which we conduct our business.

3.3 Impacts on cultural heritage

This section outlines impacts and benefits of mining and processing in the context of:

- negotiation and engagement;
- direct impacts;
- indirect impacts;
- socio-cultural and environmental changes; and
- employment and training.

Operational activities can have positive and negative impacts on both the tangible and intangible cultural heritage of communities. The nature of mining means it is often impossible to avoid disturbing some cultural places and objects, as the physical location of an operation depends on the geography, geology and features of the ore body. The associated infrastructure can significantly broaden the operational footprint but there can be flexibility in design, location and options for protecting cultural heritage values. Processing facilities and other major infrastructure, such as smelters, refineries and hydro dams can also have significant and widespread cultural heritage impacts.

Impacts on cultural heritage can be both direct and indirect. Impacts can vary in scale and scope over the life of the operation, sometimes spanning several generations. The nature and degree of impacts to cultural heritage will differ from exploration, project study phases, construction and operations through to closure as the extent of ground disturbance and other destructive activities (eg: vibration, emissions, water extraction) and number of personnel fluctuates, and

company processes and activities develop and change.

The value placed on cultural heritage features may vary according to the type of operation taking place. In areas where many mining activities exist, or that have already experienced high levels of impact to their cultural heritage, people are more likely to highly value any residual cultural heritage regardless of its perceived value in relation to cultural heritage elsewhere. Throughout the operation's lifecycle a community's cultural beliefs and practices may also change in relation to changing socioeconomic or biophysical conditions. This can mean that places, objects or practices that were once valued may no longer be as highly regarded. Alternatively, preserving some cultural practices can prevent them from evolving and changing naturally, which can itself be regarded as destructive to a community's broader cultural wellbeing.

Negotiation and engagement

Involvement of local communities as early as possible can help minimise any direct negative impact of mining or processing on cultural sites and objects as well as identifying opportunities to create positive impacts. Community engagement can also help identify community concerns

about changing social or cultural processes and help to achieve acceptable outcomes.

The value of cultural heritage places often relates to local belief systems: it is not always possible for those outside of a community to know how mining will be perceived to impact on cultural heritage. It is not the role of a business or its employees to critique or interpret local belief systems. Rather, all concerns should be considered important and can only be addressed through the community negotiation and engagement processes.

Cultural heritage management activities undertaken by a business without appropriate engagement can lead to unintended impacts to cultural heritage values. It is important to acknowledge not only the legal rights of the community with respect to its cultural heritage but also its customary and moral rights to make decisions about its management. This is important because sometimes the management outcomes that heritage professionals and other stakeholders suggest may not sit well with the local custodians of that heritage. For example, cultural heritage management decisions to conserve cultural

heritage in certain ways can have unintentional impacts, especially if conservation restricts access to particular heritage sites or is in conflict with traditional cultural practices (see box 27).

Cultural sensitivity, an awareness and consideration of other cultures and their customs, is a cornerstone of good engagement. When absent, it can lead to deep and long-running mistrust and conflict between a company and local community. Engagement with the custodians of cultural heritage, through a collaborative and respectful approach to the identification, protection and management of cultural places, objects and practices, helps to establish and maintain trust and provide a foundation for constructive long-term relationships. It is integral to cultural sensitivity to adhere to community concerns about confidentiality of cultural information. Practicing culturally sensitive reporting of information is important for respecting the community and garnering their trust.

Cultural sensitivity may be shown through the incorporation of ceremony into business operating procedures (as at the Argyle mine in Australia) or through having culturally-sensitive work schedules that allow people to attend important ceremonies or to hunt when the season is right (Diavik mine, Canada).

Direct impacts on cultural heritage

Physical cultural heritage can be directly impacted by operational activities through land clearance, ground disturbance, excavation, drilling, vibrations/

27. Pilbara tree burial

A heritage survey in the Pilbara region of Australia located an Aboriginal burial bundle cradled in the forking branches of a very old Mulga tree. The burial tree was assessed as highly significant and conservation measures were planned in accordance with the significance assessment. In their proposed management plan, the heritage professionals wanted to plant new Mulga trees to be shaped to support the burial bundle once the old tree died and in doing so retain the integrity of the site. The Traditional Owners of the area were against this idea, stating that the tree burial was most likely a punishment of some kind with the intention that once sufficient time had passed the tree would die and the bones be rightly left to return to the earth.

28. Positive impacts of mining on intangible cultural heritage

A mining company operating in Tocantins, Brazil has launched a project jointly with the local indigenous community to safeguard its intangible cultural heritage in the face of significant cultural change. The project aims to gather and record stories told by the elderly chiefs. The project also incorporates workshops to teach local indigenous people transcription, photography and filming techniques so that the stories and customs of the local indigenous culture can be safe-guarded and passed down to future generations.

Though mining will necessarily impact the local community, the company has initiated programmes to help the local community record and maintain its important cultural history.

subsidence, water extraction, pollution, construction and the like. It can also be impacted by vandalism and theft by employees, contractors or visitors. These activities can result in the disturbance or destruction of cultural heritage or limit access to culturally significant places. Mitigation options will depend on the nature and significance of a site, and can range from destruction with minimal recording to detailed archaeological research and the relocation of movable cultural heritage.

Despite the best-laid plans, our operational activities can accidentally destroy or disturb significant tangible cultural heritage remaining in place during operations. This can be as simple as inadvertently driving a car over a scatter of unobtrusive artefacts and destroying them.

If this happens, the operation needs to accept responsibility, acknowledge the mistake, and make an effort to restore their relationship with the custodians of the affected cultural heritage.

Mining and processing can, on the other hand, help to strengthen the protection of cultural heritage. For example, archaeological finds that may have remained undiscovered without mining can contribute to local knowledge about community associations with places and can enhance community pride (see Box 28 for an intangible cultural heritage example). Similarly, mining and processing developments can provide the economic and other capacities needed to protect heritage from vandals and looting or from natural deterioration.

Baseline surveys and community consultation can never ensure

the identification of all cultural heritage, and there will inevitably be “chance finds” during the life of an operation. Rio Tinto companies have procedures, agreed upon by community and stakeholders, for addressing “chance finds” when they occur. In some instances, such finds will need to be reported to local or national heritage registers and this can result in legal directions to preserve or conserve the heritage item.

Sometimes the national context will require certain cultural heritage items to be relinquished to the government or a heritage body for research or for placement in national, regional or local museums. These outcomes may not accord with local wishes. In such instances the business should first comply with the law and also ensure that the community is fully engaged and advised of what is happening.

Having assured access to identified sites and places of importance is a critical component of community wellbeing, especially for indigenous or other minority groups. Facilitating the continued use of land for such things as hunting and fishing or simply for walking through may also be a key element in an operation's cultural heritage management plan. Equally, legal approaches that seek to discredit local attachment to places or specific cultural objects often have a direct and negative impact.

Mining and processing operations can over time develop cultural heritage values in the form of industrial heritage. This consists of the remains of industrial culture which are of historical, technological, social, architectural

or scientific value and interest. This is particularly the case where they provide evidence of innovations in energy extraction or generation, transportation or service settlements as well as developments in the social, technical and economic circumstances of mining and processing. These remains usually consist of buildings and machinery, workshops, mills and factories, mines, processing and refining facilities, warehouses and stores, places where energy is generated, transmitted and used, transport and all its infrastructure, as well as places used for mine social activities such as housing, religious worship or education. These tangible remains may often have intangible values too, as emblems of a bygone era, symbols of industrial progress and development, measures of changing social mores and repositories of family history.

New mining or processing activities on historic mining operations can potentially harm (eg: through physical destruction) or help manage (eg: through documentation, interpretation, or continued use) the tangible and intangible industrial heritage values of the site.

Indirect impacts on cultural heritage

While the direct impacts on cultural heritage can be dramatic and are readily recognised, an operation's indirect impacts which extend beyond the physical are not as easily identified. Large development projects can often bring about significant social and cultural change, especially when they occur in areas that are relatively undeveloped or remote.

Socio-cultural changes

Some degree of social change is inevitable when large-scale developments occur. This is particularly true if the area has not been developed previously. It is important is that the change is acceptable to those who are affected and occurs at a pace which does not cause undue stress and result in community breakdown and social dysfunction.

Socio-cultural change may be caused by an increase in numbers of outsiders who bring with them different ideas, technologies and value systems. In some areas, this can contribute to shifts in local languages, customs, rituals and beliefs (see box 29).

The following factors should be considered when determining the scope of the impact from mining and processing activities on intangible cultural heritage:

- respect, preservation, protection and maintenance of traditional knowledge, innovations and practices;
- sacred sites and associated ritual or ceremonial activities;
- continued customary use of biological resources and landscape;
- respect for the need for cultural privacy and the maintenance of cultural obligations; and
- continued exercise of customary law.

Employees and contractors can inadvertently act in ways that damage physical cultural heritage or that are insensitive to local customs and therefore impact on intangible cultural heritage. This can be addressed through training employees and contractors in cultural norms and

considerations, such as respecting taboos associated with certain areas of land and respectful ways to touch or talk to people. For example, certain Southeast Asian minorities cannot be touched on the head without causing offense for spiritual reasons. Similarly, for a female employee to swim in a swimsuit and expose her thighs would be considered disrespectful in Melanesian countries for example where the practice is culturally unacceptable.

Offence can also be caused if employees fail to respect the secret or gendered nature of some cultural heritage knowledge. Often diversity of the workforce and the surrounding community might also mean that several cultures mingle in the one workplace or community. Employees need to be informed about how to act respectfully towards all cultural heritage issues, both in their workplace and in the local communities.

Mining and processing activities can increase economic inequality in an area. The sudden influx of cash through compensation, royalties or wages can result in significant changes to local cultural practices and sometimes cause conflict and the decay of social mores and respect by the young for elders. Increased access to cash may lead to neglect of people's subsistence activities, such as herding, gardening or hunting, as well as the influence of alcohol, drugs and crime. Economic changes can also result in the closure of established businesses that themselves have cultural heritage value but which cannot survive amid the new economic conditions.

29. Cultural change in Papua New Guinea

Recent consultation by a large mining company in a remote part of Papua New Guinea resulted in a list of cultural changes that the community has experienced since mining began in its area, including:

- a breakdown of customary law;
- changes in the material used to construct men's houses and a reduction in the construction knowledge in younger generations;
- the wearing of shorts and trousers by women;
- the incorporation of non-traditional foods, such as beer and rice, into feasts and exchange rituals;
- economic changes have led to increased competition in customary exchange rituals creating inflation;
- changes in the local language, especially through conflation with English and Tok Pisin; and
- weakened respect and avoidance of taboo places.

Conversely, our engagement with communities on forward-thinking cultural heritage programmes can actively safeguard intangible heritage and contribute to cultural revitalisation. The creation of museums or the facilitation of cultural celebration programmes, for example, can be very powerful tools for keeping culture alive. Museums can incorporate changing living perspectives by highlighting how cultural heritage plays a role in contemporary society, portraying its evolving and sometimes contested significance and including interactive and creative displays that are designed in consultation with local communities. Displays can be arranged in unconventional ways to highlight the values that local communities or minority groups prefer rather than in traditional museum display approaches. Other examples include oral history documentation and the use of visual media to record ceremonies or dances.

Cultural heritage tourism is a potential socioeconomic benefit that can be fostered by our businesses. The infrastructure built for operations can improve

tourist access to remote areas. Cultural tourism is a sensitive topic, however, as tourism can also have significant negative impacts on cultural places and practices, and there should be scrupulous attention paid to the wishes of custodians of the local culture.

Environmental changes

Mining can result in the alteration, loss and destruction of traditional and communal lands and resources which are linked to cultural practices and beliefs. For some people the health of the environment connects directly to the health and wellbeing of the human population because of both physical and spiritual links between people and animate and inanimate elements of the environment. The aesthetic and ecological values of landscapes must also be considered.

As stated in section 1 of this background reader, including local/indigenous people in biological monitoring or other land-management practices can be part of an operation's cultural heritage approach. This is because many traditional/indigenous belief

30. Cultural sensitivity in the workplace

Some societies maintain a system of cultural reciprocity and exchange which obliges individuals to share what they have with others.

This poses a challenge to local employees in juggling their responsibilities to the company and to their own community. For example, an employee driving a company car may be culturally obliged to stop and give a lift to kinfolk despite a company rule that only allows employees to travel in company cars. Company policies can threaten older customary patterns in unseen ways.

These issues need to be handled very sensitively and are a commonly voiced concern of local communities over the impact of developments on their cultural practices.

systems provide people with moral obligations to actively manage their customary land, even if there is now an operation on it.

The extensive knowledge that local people often hold about their environment is a unique and important resource for mining companies pursuing environmental responsibility, and provides new ways to view landscape and its associations. Furthermore, involving indigenous people in land management may help to keep alive traditional/indigenous knowledge and practices which might otherwise be lost. For example, by re-instating traditional burning practices in arid landscapes as part of land and bushfire management.

Local employment and training

Direct or indirect employment in the mining industry provides significant opportunities for local people to increase their economic status. However, the ability of local people to take up employment may at times be limited by cultural considerations, and the work environment itself can have negative impacts on cultural practices and languages. Cultural heritage issues and human resources issues need to be considered jointly.

Key points are:

- Overly-rigid employment structures may prevent people from maintaining their cultural obligations such as attending funerals, ceremonies and rituals or participating in seasonal hunting, and this has a negative impact on the culture overall. These sorts of considerations may need particular attention at operations wanting to encourage local indigenous employment and contracting.
- Enforcement of work hours may conflict with a time-dependent cultural practice such as prayers. For example, if the community observes a rest day mid-week, as a cultural or spiritual practice, this can conflict with an inflexible Monday-through-Friday roster.
- When indigenous people are employed for their cultural engagement skills and expertise, the operation should ensure that the workplace structures and environment are compatible with their cultural ways of working and avoid placing any restrictions on these employees which might hinder them from using the skills they were employed to use.
- In some instances, cultural norms prevent direct contact between certain community members or prevent women

or men accessing certain areas of land. If these considerations are not recognised in Human Resources policies they can impact on the cultural belief systems and cultural wellbeing of local employees (see box 30).

- The use of a dominant workplace language, such as English in a non-English speaking setting, can undermine the use of local languages. This could be avoided by producing bilingual documents and signage.
- Environmental and cultural heritage monitoring and management could provide very effective employment and training opportunities for local people.
- Cultural awareness training/ cultural inductions help ensure that all employees are properly briefed and are able to work in a diverse and culturally sensitive environment. Willingness and ability to work in a diverse environment and undergo cultural awareness training should be a criterion for recruitment.
- Recruitment is accessible to all candidates, especially those from the local community. The process should be designed with the local cultural context in mind.

Operations also need to balance their Human Resources approach so it is consistent with their diversity and other policies as well as respectful of and responsive to cultural belief systems. For example, cultural norms that prevent women from working at certain tasks can be at odds with diversity policies which attempt to increase the number of women employed at the operation. These are sensitive issues that need proactive approaches, close engagement and often creative solutions.

3.4 International protocols and standards for protecting cultural heritage and diversity

Numerous international agreements, charters and policies frame the cultural heritage rules and debates within which mining and mineral processing operates. These frameworks have been developed over many years of concerted effort by local and international bodies to protect the world's cultural heritage.

To accentuate the key concepts in this guide this section outlines:

- important international heritage conventions, charters and guidelines;
- cultural heritage and human rights declarations; and
- cultural heritage and sustainable development frameworks.

This section outlines key developments in international heritage and in industry standards and protocols and how they relate to good practice cultural heritage management in the mining and processing industry. Though these international agreements exist, they do not override the local legal context. Understanding the history and context of cultural heritage ideas and concepts helps to understand the nuances and motivations behind on-the-ground practices.

International heritage conservation conventions and charters

Many aspects of cultural heritage are covered by international conventions and charters. Changes in heritage practices can be traced through these agreements which provide a basis on which cultural heritage legislation is founded as well as important guidelines for management by industry of both tangible and intangible heritage. This section distinguishes between conventions and charters that carry legal obligations and those that are voluntary and serve primarily to guide.

The following carry some level of legal obligation or commitment by signatory states to the governing organisation (UN, UNESCO, etc.).

Convention for the Protection of the World Cultural and Natural Heritage 1972

The 1972 World Heritage Convention (UNESCO, 1972) was the first attempt to create a list of internationally significant heritage sites. It continues to be the primary instrument in international law for enforcing the protection of natural and cultural sites of “universal” significance.

To be inscribed on the List, a cultural and/or natural site must be judged to be “of such exceptional interest and such universal value that their protection is the responsibility of all mankind”. Once added to the World Heritage List the sites receive legal protection from the host nation state in compliance with the Convention's guidelines and the nation is then eligible for international technical and financial aid and, to some extent, supervision in relation to the management of the site.

The need to manage sites of “outstanding universal value” to all humanity over and beyond local interests has been criticised by some indigenous people and nation states, who argue for the right to define management of world heritage sites according to their own values and means.

Recent revisions to its Operational Guidelines have broadened the category of qualified types of sites, acknowledging significant interactions between people and environment. They have also recognised the importance of factoring in cultural context and cultural value in assessing the authenticity of a world heritage site, incorporating a much wider range of cultural values than was previously recognised in World Heritage listings.

31. Nominations for the World Heritage List for cultural reasons

Criteria applied by the World Heritage Committee for evaluating nominations for the World Heritage List for cultural reasons (as revised in 2005):

- i. to represent a masterpiece of human creative genius;
- ii. to exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;
- iii. to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;
- iv. to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;
- v. to be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;
- vi. to be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria);
- vii. to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;
- viii. to be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features;
- ix. to be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;
- x. to contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.

UNESCO Convention for Safeguarding of the Intangible Cultural Heritage 2003

The UNESCO Convention for Safeguarding of the Intangible Cultural Heritage 2003 is an attempt to document and safeguard examples of 'living heritage', these being the social practices that create distinctive cultural communities. The purpose of the convention is to devise strategies to minimise threats to living heritage and to enhance the social contexts for these expressions through 'safeguarding'.

Safeguarding is defined in the convention as "measures aimed at ensuring the viability of the intangible cultural heritage, including the identification, documentation, research, preservation, protection, promotion, enhancement, transmission, particularly through formal and non-formal education, as well as the revitalization of the various aspects of such heritage."

This definition recognises that safeguarding does not mean protection or conservation in the usual sense, as this may cause intangible cultural heritage to become fixed or frozen. Rather, safeguarding means ensuring the viability of the intangible cultural heritage by guaranteeing its continuous recreation and transmission. To achieve continued relevance, safeguarding must be based on the participation of the communities, groups and individuals that create, maintain and transmit such heritage, and to involve them actively in its management.

Other Relevant International Conservation Bodies and Agreements

- UNESCO 1970 Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property
- UNESCO 1997 Resolution 23 creates the proclamation of the Masterpieces of Oral and Intangible Heritage of Humanity; 90 examples proclaimed in 2001, 2003 and 2005
- UNESCO 2001 Convention on the Protection of the Underwater Cultural Heritage (entered into force 2009)
- UNESCO 2005 Convention on the Protection and Promotion of the Diversity of Cultural Expression (entered into force 2007)

The following international agreements and charters are voluntary and serve to frame good practice. Though they do not carry the same legal obligations as the agreements mentioned above, they have had similar impact on the overall development of cultural heritage practice.

Athens Charter for the Restoration of Historic Monuments 1931 & International Charter for the Conservation and Restoration of Monuments and Sites 1964 (Venice Charter)

One of the earliest international conventions relating to cultural heritage is the Athens Charter for the Restoration of Historic Monuments. The Athens Charter was adopted in 1931 at the First International Congress of Architects and Technicians of Historic Monuments in Athens. Although the focus was clearly architectural, the Congress was

32. UNESCO Convention's Article 14 – Education, awareness-raising and capacity-building

Each State Party shall endeavour, by all appropriate means, to:

- (a) ensure recognition of, respect for, and enhancement of the intangible cultural heritage in society, in particular through:
 - (i) educational, awareness-raising and information programmes, aimed at the general public, in particular young people;
 - (ii) specific educational and training programmes within the communities and groups concerned;
 - (iii) capacity-building activities for the safeguarding of the intangible cultural heritage, in particular management and scientific research; and
 - (iv) non-formal means of transmitting knowledge;
- (b) keep the public informed of the dangers threatening such heritage, and of the activities carried out in pursuance of this Convention;
- (c) promote education for the protection of natural spaces and places of memory whose existence is necessary for expressing the intangible cultural heritage.

conscious of the importance of people's attachment to place, stating that the best guarantee for the "preservation of monuments of art derived from the respect and attachment of the people themselves".

Though not legally binding, the Athens Charter introduced the idea that problems of preservation of historic sites should be solved by legislation at national level and that sites are to be given strict custodial protection. The charter also called for each country to maintain official records of each historic monument in an inventory. Most countries have now extended these registers to include other types of cultural heritage.

The Second International Congress of Architects and Technicians of Historic Monuments met in Venice in 1964 and adopted the International Charter for the Conservation and Restoration of Monuments and Sites, also known as the Venice Charter. The Venice charter is a technical document that specifies

internationally recognised guidelines for the preservation and restoration of ancient buildings. Various nation states have adapted the conservation practices of the Venice Charter to reflect their unique cultural and management contexts.

ICOMOS Charter for the Protection and Management of the Archaeological Heritage, 1990

Drafted by the International Committee for Archaeological Heritage Management (ICAHM), the ICOMOS Charter for the Protection and Management of the Archaeological Heritage provides detailed principles for the management of archaeological heritage especially in relation to the threat of development.

The Charter outlines the need for protection of the archaeological heritage to be integrated into policies relating to land use, development and planning at international, national, regional and local levels. Cultural, environmental

33. ICOMOS Charter for the Protection and Management of the Archaeological Heritage, 1990

The Charter explicitly recognises that elements of the archaeological heritage constitute part of the living traditions of Indigenous peoples, and for such sites and monuments the participation of local cultural groups, especially Indigenous people, should be actively sought and is essential for their protection and management of sites and monuments.

The Charter states that in some cases it may be appropriate to entrust responsibility for the protection and management of sites and monuments to Indigenous peoples.

34. Unique components of the 1999 Burra Charter

In its 1999 version, the Burra Charter makes significant headway in recognising and respecting cultural diversity in heritage management by outlining that the cultural significance of places is “embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related object”.

It recognises explicitly that different individuals or groups may see different values in a place and outlines the importance of the participation of people for whom the place has special associations and meanings or who have social, spiritual or other cultural responsibilities for the place.

The Burra Charter does not however address the protection and celebration of non-tangible cultural practices.

and educational policies should also include considerations of archaeological heritage.

The Charter outlines principles for a variety of processes including survey, excavation, documentation, research, maintenance, conservation, preservation, reconstruction, information, presentation, public access and uses of and procedures surrounding the heritage. These guidelines can help inform mine managers about the best approaches to tangible cultural heritage management.

The Charter is reflected in the national heritage legislation of countries such as Australia, providing legal protection to archaeological heritage.

The Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (The Burra Charter)

In 1979, heritage professionals working in Australia adopted their own charter that tailored the international principles of the Venice Charter to an Australian context - The Australia ICOMOS Charter for the Conservation of Places of Cultural Significance, known as the Burra Charter (revised in 1999).

The Burra Charter was drafted in an attempt to overcome Eurocentric preoccupations with the physical fabric of cultural heritage over more intangible notions. It expanded heritage considerations from the concentration on “sites and monuments” to include all “places of cultural significance”. The Burra Charter extended the definition of cultural significance beyond aesthetic and historic value, which

had been recognised in previous heritage documents, to also include social and spiritual values for the past, present and future. The Burra Charter was the first national or international cultural heritage conservation document to reference spiritual values and this element has since been picked up by other nations.

Nara Document of Authenticity 1994

The Nara Document of Authenticity 1994 was conceived to build up and broaden the principles set out in the Venice Charter 1964 to address the expanding scope of cultural heritage concerns in contemporary times. It also explores the issue of testing authenticity of cultural properties for the World Heritage List in full accordance to social and cultural values of all societies.

In line with the principles of UNESCO, The Nara Document acknowledges that heritage may possess universal value. This appears as Provision 8 but is followed immediately, in the same provision, by the statement that “Responsibility for cultural heritage and the management of it belongs, in the first place, to the cultural community that has generated it, and subsequently, to that which cares for it.”

The Nizhny Tagil Charter for the Industrial Heritage 2003

The Nizhny Charter, drafted by The International Committee for the Conservation of the Industrial Heritage, asserts that the buildings and structures built for industrial activities, the processes and tools used within them and the towns and landscapes in which they are located, along

with all their other tangible and intangible manifestations, are of fundamental importance. Their meaning and significance should be studied and shared, and the most significant and characteristic examples should be identified, protected and maintained.

The charter outlines procedures for identifying, recording, protecting and conserving industrial heritage and the need to educate and train professionals and members of society in the historic importance of industrial heritage.

Akwé: Kon Voluntary Guidelines 2004

Developed out of the Convention on Biological Diversity, these voluntary guidelines are intended to influence the conduct of cultural, environmental and social impact assessments regarding developments that may impact on sacred sites, lands and waters that are used or occupied by indigenous or local communities. They promote the use of a transparent and inclusive process for community identification and a thorough engagement and understanding of the local context to be incorporated into assessments. They call for cultural, environmental and social impact assessments to be integrated as a single process, a principle that is pertinent to cultural heritage management as well. From these assessments, the guidelines also advise developing a management system or monitoring plan to address possible impacts.

35. The Nara Document on Authenticity

- Conservation of cultural heritage is rooted in the values attributed to the heritage.
- It is not possible to base judgements of values and authenticity within fixed criteria as they differ between cultures.
- The respect due to all cultures requires that heritage properties must be considered and judged within the cultural contexts to which they belong.
- Judgements of authenticity may be linked to a great variety of sources of information. Aspects of the sources may include form and design, materials and substance, use and function, traditions and techniques, location and setting, and spirit and feeling, and other internal and external factors.

36. The Akwé: Kon Guidelines

Produced by the Secretariat of the Convention on Biological Diversity The Akwé: Kon Guidelines provide advice for:

- including indigenous and local communities in the screening, scoping and planning of development projects;
- considering the cultural, environmental and social concerns and interests of indigenous and local communities;
- incorporating traditional knowledge, innovations and practices of indigenous and local communities in environmental, social and cultural impact assessment processes, with due regard to the ownership of and the need for the protection and safeguarding of traditional knowledge, innovations and practices; and
- considering the interrelationships among cultural, environmental and social elements of development projects.

37. Universal Declaration of Human Rights

Article 27

- 1) Everyone has the right to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and benefits.
- 2) Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.

Cultural heritage and human rights declarations

The freedom to practice one's cultural beliefs and not to have this practice hindered by others is considered an inalienable human right. Rights associated with cultural heritage are addressed in the following rights declarations and influence the approach and methods of cultural heritage management:

- Universal Declaration of Human Rights
- Declaration on the Rights of Indigenous People 2007
- UNESCO Universal Declaration on Cultural Diversity 2001
- The International Covenant on Economic, Social and Cultural Rights 1966.

Because these declarations and covenants are binding on signatory states, they will determine the legislative context in which Rio Tinto operates and may influence how an operation manages its activities and engages with the community.

Cultural heritage and sustainable development

Cultural heritage concerns are covered explicitly and implicitly in several international human development protocols and charters.

Millennium Development Goals

The Millennium Development Goals (MDGs) were adopted by 189 UN member states at the

2000 Millennium Summit.

The goals synthesise important commitments made at key conferences and summits during the 1990s and recognise explicitly the relationships between growth, poverty and sustainable development.

Businesses have an important role to play in helping nations achieve the Millennium Development Goals by 2015. MDGs have been one component driving businesses to become environmentally and socially responsible, and to adopt sustainable development agendas.

Although there is no MDG goal directly concerning cultural heritage there are linkages between cultural heritage and several MDG goals, especially Goal 7 on ensuring environmental sustainability. Cultural heritage and environmental sustainability are intertwined. Safeguarding cultural practices that are environmentally sustainable in practice can help promote environmental sustainability. Protecting biodiversity can also have positive cultural heritage outcomes.

Convention on the Value of Cultural Heritage for Society (Faro, 2005)

The Faro Convention developed by the Council of Europe provides a framework for heritage policies that ensure the rightful place of cultural heritage and culture

at the centre of sustainable development. It carries particular influence in the European context as it is binding for several signatory European governments. The Faro Convention frames heritage as a resource for:

- human development;
- the enhancement of cultural diversity and the promotion of intercultural dialogue; and
- economic development based on the principles of sustainable resource use.

The Convention addresses gaps in earlier international instruments which do not reference the growing importance of cultural heritage relative to:

- sustainable development, where cultural heritages are seen as precious resources in the integration of the different dimensions of development: cultural, ecological, economic, social and political. Cultural heritage is valuable for its own sake and for the contribution it can make to other policies;
- globalisation, in which cultural heritages are resources for the protection of cultural diversity and sense of place in the face of growing standardisation; and
- renewed awareness of the cultural identity dimension in conflicts, as cultural heritages can also be used to develop dialogue, democratic debate, awareness, friendship and openness between cultures.

World Bank's Environmental and Social Safeguards

The World Bank's environmental and social safeguards are a cornerstone of its support for sustainable poverty reduction. The objective of the safeguards is to prevent or mitigate undue harm to people and their environment in the development process. These policies provide guidelines for bank and borrower employees in the identification, preparation, and implementation of programmes and projects.

Tangible cultural heritage is dealt with in the World Bank's Operational Policy 4.11 on Physical Cultural Resources, the World Bank's *Physical Cultural Resources Safeguard Policy Guidebook* and the *Physical Cultural Resources Country Profiles*. Protecting cultural heritage (both tangible and intangible) is also an aspect of the World Bank's Operational Policy 4.10 on Indigenous People.

The World Bank describes culture as a "resource for economic and social development" and states that the possibility to generate income from cultural assets can reduce poverty.

International Finance Corporation (IFC) Performance Standards on Social and Environmental Sustainability

The IFC performance standards on social and environmental sustainability define IFC clients' roles and responsibilities for managing their projects and the associated requirements for retaining IFC support. There are eight performance standards, covering: social and environmental assessment management systems, labour and working conditions, pollution prevention, community health

38. World Bank environmental and social safeguards

Operational Policy 4.11 on Physical Cultural Resources

Recognises that:

Physical cultural resources are important as sources of valuable scientific and historical information, as assets for economic and social development, and as integral parts of a people's cultural identity and practices.

Operational Policy 4.10 on Indigenous People

Recognises that:

The identities and cultures of Indigenous Peoples are inextricably linked to the lands on which they live and the natural resources on which they depend. These distinct circumstances expose Indigenous Peoples to different types of risks and levels of impacts from development projects, including loss of identity, culture, and customary livelihoods...

39. IFC Performance Standard 8: Cultural Heritage

The Standard covers requirements regarding:

- protection of cultural heritage in project design and execution;
- procedures for chance finds;
- consultation;
- removal of cultural heritage
- critical cultural heritage; and
- project's use of cultural heritage.

40. IFC Performance Standard 7: Indigenous Peoples

Where a project may impact upon cultural resources that are central to the identity and/or cultural, ceremonial, or spiritual aspects of Indigenous Peoples lives, priority will be given to avoidance of such impacts through retention of cultural resources. Where significant project impacts on cultural property are unavoidable, the client will obtain the FPIC of the Affected Communities of Indigenous Peoples.

and security, land acquisition and resettlement, biodiversity conservation, indigenous peoples and cultural heritage.

Cultural heritage is dealt with directly in Performance Standard 8 and its accompanying guidance note. The objectives of IFC Performance Standard 8 are to: protect cultural heritage from the adverse impacts of project activities and support its preservation; and promote the equitable sharing of benefits from the use of cultural heritage in business activities. The standard applies to heritage regardless of whether it is legally protected or it has been previously disturbed. The document focuses

on tangible cultural heritage but makes provisions for intangible heritage as well.

Intangible heritage is mostly referred to in relation to the commercialisation of intangible heritage by the project proponent.

The IFC Performance standards were updated in 2011. The new versions, effective from January 2012, include a requirement for businesses to obtain the free, prior, informed consent of indigenous peoples where a project will have significant impacts upon their cultural property (see box 40).

41. ICMM Sustainable Development Framework

Principle 03: Uphold fundamental human rights and respect cultures, customs and values in dealings with employees and others who are affected by our activities.

- Ensure that all relevant employees, including security personnel, are provided with appropriate cultural and human rights training and guidance.
- Minimise involuntary resettlement, and compensate fairly for adverse effects on the community where they cannot be avoided.
- Respect the culture and heritage of local communities, including indigenous peoples.

Principle 04: Implement risk management strategies based on valid data and sound science.

- Consult with interested and affected parties in the identification, assessment and management of all significant social, health, safety, environmental and economic impacts associated with our activities.
- Inform potentially affected parties of significant risks from mining, minerals and metals operations and of the measures that will be taken to manage the potential risks effectively.

Industry-related international principles

Industry-related principles provide business-focused guidelines for industries to shape their managerial systems and activities in compliance with principles of sustainable development and social and environmental responsibility. These principles provide more than a moral foundation for managing cultural heritage appropriately, as operational non-compliance can have severe reputational and legal costs.

International Council of Mining and Metals' (ICMM) Sustainable Development Framework
ICMM's Sustainable Development Framework comprises three elements – a set of ten Principles (including a set of supporting position statements); public reporting procedures; and independent assurance procedures for mining and metals companies to address issues of sustainability in the industry.

The ten Principles are based on the issues identified in the Mining, Minerals and Sustainable Development (MMSD) project, a two-year process of consultation with stakeholders to identify the issues relating to sustainable development in the mining and minerals sector. Principles 3 and 4 are specifically relevant to cultural heritage.

Equator Principles

The Equator Principles, which draw upon the IFC Performance standards, were developed by financial institutions to ensure that the projects they fund are developed in a manner that is socially and environmentally responsible. Projects are expected to establish minimum social and environmental standards. The Equator Principles also require negative impacts of projects to be avoided where possible, or otherwise, reduced, mitigated and/or appropriately compensated. The principles explicitly recognise the role of consultation, community engagement and grievance mechanisms in community relations which is also reflected in cultural heritage discourse.

4. References

Acronym list	118
Glossary	119
Rio Tinto's policies, standards and guidances	124
Key websites	125
References	126

Acronym list

4WD	a motor vehicle with a four-wheel drive transmission system
CHM	Cultural Heritage Management
CHMP	Cultural Heritage Management Plan
CHMS	Cultural Heritage Management System
CHZP	Cultural Heritage Zone Plan, used by Rio Tinto Coal Australia
EMAB	Environmental Monitoring Advisory Board from the Diavik Diamond Mine
EMS	Environmental Management System
GDP	Ground Disturbance Permit System
GIS	Geographic Information Systems (system used to store, retrieve, map and analyse any geographic data)
GPS	Geographic Positioning System (satellite-based navigation system used to determine exact latitudinal and longitudinal location)
GRI	Global Reporting Initiative
ICAHM	International Committee on Archaeological Heritage Management
ICMM	International Council on Mining and Metals
ICOMOS	International Council on Monuments and Sites
IFC	International Finance Corporation
ILUA	Indigenous Land Use Agreement (Australia)
ISO	International Organisation for Standardisation
KUC	Kennecott Utah Copper
MDGs	Millennium Development Goals (developed by the UN)
MYP	Communities Multi Year Plan
OT	Oyu Tolgoi, Rio Tinto joint venture mine development project located in Southern Mongolia
PKC	Processed Kimberlite Containment Area
RBM	Richard Bay Minerals
SEART	Rio Tinto's Social and Environmental Accountability Reporting Tool
SIA	Social Impact Assessment
SMA	Communities Site Managed Assessment
SMART	Specific, Measurable, Attainable, Results-focused, Time-oriented
SOPs	Standard Operating Procedures
SRA	Social Risk Assessment
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UWA	University of Western Australia

Glossary

Aboriginal group(s) – any aboriginal group and or representative body recognised either by legal or statutory process or through legitimately and broadly-supported local community acknowledgment that is affected by Rio Tinto operations, decisions or actions.

Aesthetic value – aspects of sensory perception for which cultural heritage may be valued such as form, scale, colour texture, materials and others.

Agreement – a legally binding arrangement, which may be formally documented, usually between a Rio Tinto business and a community or communities, that commits parties to actions specified.

Anthropologist – a person with appropriate qualifications and experience to conduct an ethnographic/anthropological survey, assess the findings and make management recommendations.

Archaeological site – a place with physical evidence of past human activity; may also have a more specific, legislative definition.

Archaeologist – a person with appropriate qualifications and experience to conduct an archaeological survey, assess the findings and make management recommendations.

Audit – a systematic, documented, periodic and objective evaluation of a business's systems, practices and performance in relation to predetermined criteria: It is conducted according to a defined schedule and protocol and includes inspections, interviews and document review.

Authenticity – a measure of the extent to which a thing might be considered to be the remains of the original. Judgements of authenticity may be linked to a great variety of sources of information including aspects of form and design, materials and substance, use and function, traditions and techniques, location and setting, and spirit and feeling, and other internal and external factors.

Business unit – for the purposes of this guide, a Rio Tinto business unit is an operational entity and associated assets managed by Rio Tinto.

Business case – a business case provides justification for undertaking a particular activity, in terms of evaluating the benefit, cost and risk of alternative options.

Capacity building – strengthening the skills and ability of individuals and communities to develop and manage their own resources and livelihoods.

Collective memory – the way in which a society or social group recall, commemorate and represent their own history (as opposed to personal memory).

Communities multi-year planning – Rio Tinto's mandatory process for developing an action plan to direct Communities work at an operation or project for a pre-determined number of years. It is called "multi year" to indicate it should reach beyond a single year and it should match the usual operational planning period of the site, typically between three to five years.

Communities Site Managed Assessment (Communities SMA) – Rio Tinto's mandatory process for review of performance against the Rio Tinto Communities standard.

Communities/communities – when used as a proper noun, Communities (with a capital "c") refers to the Rio Tinto function or to Communities as a professional discipline. Used as an ordinary noun, communities refers to a group of interacting people with common interests and values who are directly affected by the company's activities, generally inhabiting or with land connections in a project's immediate or surrounding areas. A community is not a homogenous entity and can possess diversity within it.

Compensation – payment made by those causing specified and agreed loss to those who suffer impairment of their access to land, water, and other critical natural resources or livelihoods, or damage to, or destruction of, community members' individual or collective assets of any kind, whether accidental or intentional. For further information, see the Rio Tinto compensation guidance.

Complaint – a notification provided by a community member, group or institution to the business that they have suffered some form of offence, detriment, impairment or loss as a result of business activity and/or employee or contractor behaviour.

Conservation – the processes of looking after a place so as to retain its cultural significance. Includes maintenance, and may according to circumstance include preservation, restoration, reconstruction and adaptation, and will be commonly a combination of several of these.

Consultation – providing information or advice on, and seeking responses to, an actual or proposed event, activity or process.

Cultural heritage – the collective social manifestation of a community, generally handed down by tradition or with some historical association. The manifestations can be tangible, such as buildings, industrial structures and technology, landscapes and artefacts; and intangible, such as language, visual art, music, performance and customary practice.

Cultural heritage feature – a place or object to which is ascribed cultural, spiritual, aesthetic, historic, scientific, research or social significance for past, present or future generations. This can include places of 'sacred' significance to traditional custodians, such as burial sites, performance grounds, rock art, waterholes, and hills or other physical manifestations of mythological or historical events. It also can include structures, places or remains of archaeological, industrial, palaeontological, historical, religious or cultural significance at a local, regional, national, and international level.

Cultural heritage management – generally accepted practices for the conservation of cultural heritage, founded on proven principles and carried out in a way that integrates indigenous, community, professional, technical and administrative activities so that the importance of cultural heritage features is taken into account in actions that might affect them or their context.

Cultural heritage management plan – a plan that sets out the management issues and requirements relating to a specific area, or heritage place, object or practice. A CHMP is a component of a CHMS and is often a legally required and binding document.

Cultural heritage management system – a management system that will ensure conformance with the relevant items of the Rio Tinto cultural heritage management guidance.

Cultural landscape – human-modified landscape considered of importance due to the interplay of natural and cultural influences. A distinct category of cultural landscape was recognised in the revisions to the World Heritage Convention in 1992.

Cultural significance – aesthetic, historic, scientific or social value that cultural heritage may hold for past, present or future generations. The process of determining the value of a heritage feature is known as the assessment of cultural significance.

Cumulative impact – social, cultural or environmental impacts of other past, present and reasonably foreseeable future projects and activities that interact with, add to or further complicate the social, cultural or environmental impacts of the project under consideration.

Customary law – traditional common rule or practice that has become an intrinsic part of the accepted and expected conduct in a community, profession, or trade and is treated as obligatory.

Dispute – a complaint that has not been accepted as valid by one party or the other and has escalated into disagreement between the parties.

Engagement – beyond consultation, the active exchange of information, the active listening to concerns and suggestions and the active consideration of ways to mutually accommodate these, including potential responsive changes to design and operational parameters.

Ethnography – scientific description of human groups (economy, society, culture), foundational method of anthropology as the comparative study of human groups.

Gender – a socially perceived set of characteristics distinguishing the sexes (male and female). Depending on the context, the discriminating characteristics vary from sex to social role to gender identity.

Heritage register – a statutory list of objects, places or practices of heritage significance (eg: World Heritage List).

Historic value – value attributed to cultural heritage stemming from the influence of or by a historic figure, event, phase or activity.

Human rights – the rights and freedoms to which all humans are entitled as defined in the Universal Declaration of Human Rights adopted by the United Nations General Assembly in 1948.

Incident – a distinct event that may affect a community or any of its members, usually in a negative way. Specific definition needs to occur at individual business level consistent with the Rio Tinto HSEQ definition, however generic definitions for “significant incidents” (required for Group reporting requirements) are provided in the Rio Tinto Social Risk Analysis guidance. Identification and analysis of incidents over time can be used to correct hazards.

Indicator – a quantitative or qualitative variable that provides simple and reliable means to measure progress, monitor performance, or to reflect changes.

Indigenous – refers to people, communities and nations who claim a historical continuity and cultural affinity with societies endemic to their original territories that developed prior to exposure to civilizations associated with Western culture. Indigenous communities can be referred to in many ways (such as tribal, aboriginal, first nation and, most correctly, by the name they ascribe to themselves in their own language) and usually consider themselves distinct from mainstream society with whom they contest their cultural sovereignty and rights of self-determination. Their strong customary affiliation to ancestral lands and waters is where major conflicts can occur with resource developers.

Intangible heritage – something considered to be a part of heritage that is not a physical object or place, such as a memory, tradition, language, belief or a cultural practice, (as opposed to tangible heritage).

Limits of acceptable change – the maximum level of change to a cultural heritage place, object or practice, or the cumulative impacts to all these, acceptable to a community, once all the positive and negative impacts have been taken into account.

Knowledge base – information compiled in a cohesive and coherent way for subsequent and iterative analysis.

Maintenance – continuous protective care of a feature, its contents and settings and is to be distinguished from repair.

Mitigation – actions taken to lessen a negative impact on cultural heritage.

Natural heritage – plants, animals, landscape features and biological and geological processes that are not humanly modified.

Oral history – the transmission of history by verbal means. Sometimes referred to as oral tradition.

Preservation – Continued maintenance of a feature in its existing form. It is one possible conservation process.

Relocation – the removal of a cultural heritage feature to another location.

Restoration – returning the existing status of a feature to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material.

Rio Tinto Group – refers to all Rio Tinto business and corporate units worldwide.

Sacred sites – places that have spiritual or religious significance.

Scientific value – value stemming from the importance of the data involved or its rarity, quality or representativeness and on the degree to which the heritage feature may contribute further substantial information. A feature is said to have scientific value when its further study may be expected to help current research questions.

Significance – the degree to which a cultural heritage feature possesses a certain valued attribute.

Significance assessment – an assessment that determines: 1. the elements that made a cultural heritage feature significant and the types of significance that it manifests, and 2. the degree of value that it holds for society.

Social Impact Assessment (SIA) – documented studies and analysis that review the social implications of the planning, design, decision making, management and operation of a proposed new activity, most commonly carried out as a regulatory compliance exercise. In a regulatory context, the SIA can stand alone or be part of prescribed Environmental Impact Assessment (EIA), Environmental & Social Impact Assessment (ESIA) or similar process.

Social licence to operate – the intangible and informal permission granted by a community to enable a mining company to operate in that area. Social licence to operate must continually be maintained through a cooperative relationship between an operation and a community. Though they are often unwritten understandings, they can be contractually formalised into agreements such as ILUAs and other community agreements. It is a descriptor of the state of the relationship between the mining proponent and the community which can change through time.

Social Risk Analysis – specific risk analysis consistent with the Group Risk standard carried out as a standalone exercise or part of a more comprehensive risk analysis to identify and rank risks to the business arising from actual and potential social and community interaction.

Social value – the value of a heritage place, object or practice to society. The term is most often contrasted with other types of heritage values that are determined by experts, and is closely linked with the concepts of community values.

Stakeholders – those people who have an interest in a cultural heritage decision or activity, either as individuals or representatives of a group. This includes people who influence a cultural heritage decision, or can influence, as well as those affected by it.

Standards of acceptable change – see Limits of acceptable change.

Sustainable development – development which seeks to produce sustainable economic growth while ensuring future generations' ability to do the same by not exceeding the regenerative capacities of natural and social environments. For cultural heritage this means managing heritage values in light of development without compromising the ability of present and future generations to enjoy and share their heritage.

Tangible heritage – physical heritage, such as buildings and objects, as opposed to intangible heritage.

Target – intended demonstrable outcome to move towards a certain goal. To be meaningful, targets must be SMART and measured via indicators.

Traditional Owner/Traditional Owners Group – used in an Australian context only, it is defined, in relation to land, as a local descent group of Aboriginals who have common spiritual affiliations to a site on the land that place the group under a primary spiritual responsibility for that site and for the land. The group is also entitled by Aboriginal tradition to forage as of right over that land. The term is defined under the *Aboriginal Land Rights (Northern Territory) Act 1976* (Cth).

United Nations Millennium Development Goals (MDGs) – eight international development goals that all 192 United Nation member states have agreed to achieve by the year 2015. Of particular relevance to cultural heritage management is Goal 7 “Ensure Environmental Sustainability”.

Rio Tinto's policies, standards and guidances

Full documents available to Rio Tinto employees on Prospect:

- *The way we work**
- Communities policy*
- Communities standard*
- Cultural heritage management standard for Australian businesses
- Cultural heritage management guidance
- Cultural heritage management system guidance for Australian businesses
- Communities and Social Performance guidance for Projects
- Communities target guidance
- Community agreements guidance
- Community complaints, disputes and grievance guidance
- Community contributions and activities guidance
- Compensation, benefits and resource access guidance
- Consultation and engagement guidance
- Multi year planning guidance
- Resettlement guidance
- Rio Tinto Exploration procedure Communities
- Site managed assessment guidance
- Social impact assessment guidance
- Social risk assessment guidance
- Socioeconomic knowledge base guidance
- Why gender matters: A resource guide for integrating gender considerations into Communities work at Rio Tinto*

*Documents available publically on www.riotinto.com, under 'About us - Library'.

Key websites

Akwé: Kon Guidelines

<http://www.cbd.int/doc/publications/akwe-brochure-en.pdf>

Australia ICOMOS

<http://australia.icomos.org>

Council of Europe

<http://conventions.coe.int/Treaty/Commun/QueVoulezVous.asp?NT=199&CM=8&CL=ENG>

Global Heritage Fund

<http://globalheritagefund.org>

Global Reporting Initiative in the Mining Metals Sector Supplement

<http://www.globalreporting.org/ReportingFramework/SectorSupplements/MiningAndMetals>

ICMM Sustainable Development Standard

<http://www.icmm.com/our-work/sustainable-development-framework>

IFC Sustainability Standards

<http://www.ifc.org/ifcext/sustainability.nsf/Content/EnvSocStandards>

International Council on Monuments and Sites

<http://www.international.icomos.org/charters.htm>

International Covenant on Economic, Social and Cultural Rights

<http://www2.ohchr.org/english/law/cescr.htm>

Palabora Mining Company Cultural heritage register.

http://www.palabora.co.za/pmc_cultural_heritage/index.htm

Sustainable Preservation Initiative

<http://www.sustainablepreservation.org>

The Equator Principles

<http://www.equator-principles.com>

United Nations Educational, Scientific, Cultural Organization (UNESCO)

<http://www.unesco.org/new/en/culture>

United Nations Millennium Development Goals

<http://www.un.org/millenniumgoals>

Universal Declaration of Human Rights

<http://www.un.org/en/documents/udhr>

World Bank Group Safeguard Policies

<http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/EXTPOLICIES/EXTSAFEPOL/0,,menuPK:584441~pagePK:64168427~piPK:64168435~theSitePK:584435,00.html>

World Monuments Fund

<http://www.wmf.org>

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Major operations and projects



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