As COVID-19 continues to sweep across the world, businesses work hard to stay on their feet. From the moment of declaration of COVID-19 pandemic in Serbia, the Jadar project established the Business Resilience Team (BRT) with two main tasks. Firstly, the BRT started making necessary steps to manage the impact of the new situation on the health and wellbeing of our people and their families. Secondly, the BRT started looking how to maintain business continuity whilst complying with the health and other requirements set by both the Government of Serbia and Rio Tinto. Our business focus is on meeting the project goals and timelines by delivering the pre-feasibility study and our work program.

A lot of creativity and different ideas are coming through with regards to how to best deliver our expected results. Lots of these ideas include innovative ways of doing business, use of available technologies and new mindsets. It makes me proud to see that we are pioneering progress even after 147 years, a milestone we’ve as a company celebrated recently.

Our achievements in Serbia would not be possible without the support of our key stakeholders, the local Communities and our host Government of Serbia and the City of Loznica. We thank them and all other partners for marking with us a significant project milestone, the end of fruitful geological exploration phase of the Jadar deposit at the end of February.

A lot of work is still ahead of us and we are making every effort to deliver this work in a safe and timely manner, both for Rio Tinto and the Communities in which we operate.

At the core of all our activities is to be supportive to our hosting Communities. We see solidarity as a way to play our role in fighting negative effects of COVID-19 pandemic and stay connected to the community. We made donations to the most vulnerable groups in Belgrade and in Loznica in partnership with the Red Cross and we will keep providing our support.
Safety first

Preventive measures for safe working environment

We worked hard in the past few weeks in order to get the right preventive measures into place for our teams to be able to go back to work in the jadarite core shed and in the field.

The measures for prevention from the coronavirus infection outbreak applicable to our employees had been developed with assistance of the Serbian epidemiologists, Rio Tinto medical advisors and are in line with all government regulations and recommendations.

All measures are included in the work procedure which was rolled out in order to secure the health and safety of our employees and contractors.

Following the procedure rollout accompanied with appropriate trainings and delivery of protective gear (see box below), the teams have returned back to work safely.

We are all very proud and excited as the work of our colleagues is fundamental for the progress of the Jadar pre-feasibility study as well as it is enabler for the large amount of geotechnical work we have yet to undertake.

A message to all our colleagues - Stay safe!

Disinfection of work premises and protective gear

One of the biggest challenges during the fight against the COVID-19 outbreak was to secure necessary protective equipment such as masks, gloves, work suits, filters, respirators, personal hygiene and property disinfection goods. In procuring these necessities, we were helped by the Serbian Chamber of Commerce, which puts us in contact with some of the in-country producers, and by our colleagues in other parts of the world who shared their own quantities of stored protective work gear with us. We wish to thank them all!
Update from the field

Jadar geological journey: From data to knowledge

During the first quarter of this year, the Jadar Project commenced another stage of its development by completing the geological drillings under the Jadar exploration license. The celebratory event was held on 26 February in Rio Tinto premises in Loznica and was attended by high government officials, representatives of the local community, diplomatic community and Rio Tinto business partners. During the visit, the guests have been given a historic tour and project update for all the major project streams: geology, mining, mineral processing, waste management, environmental stewardship, community relations, and permitting and approvals. Our stakeholders also had an opportunity to greet and talk to a number of our talented and experienced team members. The guests understood the complexity of the work our team is doing, which is linked to the new mineral, novel processing technology and unique engineering solutions for a new greenfield industrial complex with underground mine.

Why is detailed geology necessary?

Geology is not an exact science. There is an inherent uncertainty, which needs to be proactively managed with adequate Orebody Knowledge (OBK). A key finding in most post investment reviews is that OBK was deficient at study stages. Geological exploration is also a long-term process, one of the goals of which is to reduce the risk of future investments. The biggest risk is that at the advanced stages of the project, the risks from the earliest stage materialize. This is due to the insufficient volume of work being carried out.

Although this phase of detailed exploration at the Jadar Deposit is over, this does not mean that all risks in geology and mining have been eliminated. The risks still exist, but the likelihood of their materialization has been partially reduced. Therefore, in the next stage of the project, the work required to further mitigate these risks will be continued, in compliance with Serbian regulations. The nature and amount of future work required will be defined after completion of the prefeasibility study, which will determine the value of the project and assess the level of investment required.

Since the discovery of the Jadar Deposit in 2004 we have drilled over 500 multi-purpose drill holes of various diameter and analyzed more than 200 kilometers of drill core. The drill core has been further used to feed the pilot plant located at Bundoora, Australia with the mineralized material they needed to run over a 2,000 processing tests. Throughout the geological exploration, our team had always strived to use the best available technology and innovative methodologies in order to achieve adequate Ore Body Knowledge to move the Jadar Project throughout the phased and stage-gated approval process in Rio Tinto. We have collaborated with over a 100 Serbian and international scientific and technical partners. All data is properly stored, auditable and regularly reported on to all responsible authorities through the strict regulatory reporting processes. And finally, we are proud of our safety record which is counting over 2,000,000 safe working hours. Our goal remains zero injuries and at the end of the shift, everyone goes home healthy.
Working with the Community

Underpinning solidarity with Community investments

Community consultations on spatial planning

Following thorough preparations and wide public consultations, the Government of Serbia has recently approved the Spatial Plan for the Jadar Project area and allocated funds to kick start the development of necessary road infrastructure. As part of the Spatial Plan, the Government also adopted the Strategic Environmental Assessment. Public consultations included two statutory public consultations and 17 “Open Days” organized by Rio Tinto in the period throughout 2019 to date. During these public events, different subject matter experts on air quality, water sourcing, infrastructure, and others, from renewed Serbian academic and other institutions answered the community questions.

Support in Solving property issues

The development of the project is linked to the acquisition of land necessary to develop this unique deposit of mineral jadarite. Land owned by private individuals can potentially only be acquired by the Project developer if there is formalised ownership over that land and structures on it.

From legal perspective, however, formalization of ownership remains a legal obligation of any owner and is a prerequisite for the conclusion of any potential purchase-selling agreement of your property to any third party. For that purpose our company is offering landowners support in solving property issues. Based on publicly available cadastral data and conversations we had with the ‘landowners’, we found out that many of landowners are not registered as such in the competent real estate cadastre, and may not have any other legal document to prove their ownership over the land and assets. We thus initiated this kind of support to assist in resolving any outstanding property ownership issue. This process is voluntary, and does not include registering ownership with the cadastral office or resolving other issues unless landowner wish so.

For more information please contact us on following numbers: 015 610 223, 015 872 834, 015 872 992
Prediction and spatial modelling of Jadar processing performance using integrated geomeallurgical data

As part of the ongoing Jadar Pre-Feasibility Study, the Geometallurgy and Process Development teams based in Bundoora Technical Development Centre (BTDC) Melbourne Australia are working with the Serbian team to better predict ore behavior and recovery of key elements during processing. A current focus is to better characterise the nature and distribution of non-jadarite boron hosts within the deposit. Chemical signatures indicate the presence of non-jadarite boron minerals, which if soluble during the chemical process will influence production. Determining the distribution of reactive (e.g. probertite) and refractory (e.g. searlesite) boron minerals allows the opportunity for improved process control and potential scheduling of problematic ore types to minimize the lithium trade-off. The team has used a range of innovative analytical techniques including (but not limited to) scanning electron microscopes, mass-spectrometry and hyperspectral analysis to determine mineralogical composition.

Preliminary hyperspectral data from three holes in the western part of the deposit indicate that samples with similar elemental signatures can have very different mineralogy. For example, waste rock from the footwall and the hanging wall have been characterized, to understand what impact inclusion of wall work may have on ore processing. Data indicate that although they contain comparable quantities of boron, the main mineralogical hosts are very different. The image below identifies the soluble probertite mineral (left) is more abundant above the main mineralization whereas the more insoluble mineral searlesite (right) is more abundant below the ore. Hyperspectral analyses of an additional 34 holes from the early mining area is ongoing to map these insights more broadly across the ore body. This work is helping us to better optimise processing and utilisation of the Jadar resource.
Strengthening resilience through wellbeing of our people

With the spread of COVID-19 pandemic our team has been working remotely faced with new and unprecedented challenges. One of our most important tasks from the outset has been to make sure that the teams are well-connected through these difficult times, that leadership is strong and supportive, and the overall company resilience nurtured. Bringing the sense of belonging and purpose to our daily work has proven to be of crucial importance for our employees’ wellbeing, their enthusiasm, engagement and productivity.

RIO TINTO GLOBAL NEWS BRIEF

Our COVID-19 community investment funding allocation

Our company pledged a further $25 million in order to support global grassroots community COVID-19 preparedness and recovery. This takes our total estimated voluntary global community contributions to around $60 million for 2020. This shows that we mean it when we say that we want to support both the health and safety of our employees and our communities.

In Serbia, we made a charitable donation to Red Cross worth EUR 40,000 in support of the most vulnerable categories of citizens in Belgrade and Loznica. The donation was used for procurement of essential foodstuff and personal hygiene items. Also, Rio Tinto and it employees jointly donated EUR 10,000 to UNICEF in Serbia.