Questions and answers
RDS O&G Launch 25.6.2020

The following are questions posted by the audience, and answers given by the project team during the READI Launch if the RDS O&G

Q 1. How can RDS work in conjunction with existing tagging/coding systems?

A simplified answer is that the old tag system and RDS can co-exist by software mapping between the old tag and RDS tag. The we can see both tag systems at the same time.

Q 2. Where can I find more information about 81346?

More information and updates about the standard series can be found at http://81346.com/.

The material related to the RDS O&G delivered by READI can be found on this page https://readi-jip.org/downloads/

Q 3. How much of the system life-cycle is supported by RDS? Can it be used for operation?

It support the whole life-cycle of a facility, from craddle to grave, and it supports operation and improve the information operation want, we can display design requirements, product information and operation information for the same object.

Q 4. How would you advise that companies go about implementing RDS? Any particular part of the company or projects to apply it for first?

1) Project or maintenance can be possible part of the company to start
2) Start small, learn, collect experience and expand
3) Learn from others, avoiding doing the same errors.

Q 5. Will the RDS for oil&gas be made part of the ISO IEC standard?

This on our agenda, and we have taken the first steps towards an International Standard which is a 12-18 month process at least.

Q 6. Can you give an example of a technical system and a O&G system?

Yes e.g. "Gas injection system" (O&G system), "Choke system" (Technical system". The libraries from READI include a wide array of terms mapped to the three levels of classification.

Q 7. Will this be applicable for both new and existing facilities or just for new ones?

It's applicable for both existing and new facilities, the same way we introduced 3D CAD in our industry. The propose to use it where you have positive business case.

Q 8. How do you define a TYPE? Is it a grouping of objects (systems) sharing the same attributes (properties) or is it more complex than that?

Yes, a type is an object that can represent a group, design type, variant, or similar. It is often defined based on shared properties or similarity of design. Types can be defined in e.g. a project, organization, industry.

Q 9. Why have you selected to split systems in a different way that what all engineers are used to today? -Retraining all engineers not to think according to the O&G typical systems will be a huge implementation challenge!

[Robert Skaar]This is done to move into digitalization, to be able to digitalize requirements, to support an artificial intelligent digital twin, to establish a common language within oil and gas industry, to leverage from operator proprietary specifications to a cross industrial standard and to enable connecting a large ecosystem with other industries and more

Q 10. The READI JIP presentation shows conceptul examples of ISO/IEC 81346. Has any NWIP proposal been made for ISO (i.e. towards ISO/TC67) or is the work currently focusing on the READI JIP report. Will this be addressed in the seminar today?

ISO/IEC 81346 is managed by IEC TC 3, and ISO TC 10. We have not made NWIP yet. The plan is to do so. It will no be proposed to TC67, because 81346 is cross industrial, not only oil and gas. It's not a issue in this seminar. Please send me a mail: robsk@equinor.com, if you want to discuss it more.

Q 11. Can the organization associated with a system (expl. an asset) also be represented by RDS?

This is a classic question that we often see. The recommendation is to not let the tag-structure for the asset be dictated by organizational structure. However, the RDS standard does allow for alternative views to be made which could represent this (this is not currently done in RDS-O&G). In general we advise to treat organizational info as data to be associated to the asset rather than encoding it in the tag.

Q 12. How much effort (in months) is still required to develop the RDS to a level of detail that allows deployment on real projects and with real projects?

The oil and gas 81346 is in theory ready for implementation. We need to set up a 81346 support service to support start using 81346, to ensure success in implementation. Please contact the READI JIP (https://readi-jip.org/contactus/) for more information and support.

Q 13. How does 15926 fit in into an 81346 structure?

It fits perfectly. We will convert ISO/IEC 81346 to ISO 15926/14, to make it digitally machine readable, and make use of artificial intelligence.

Q 14. We already have computer systems that describe components relationships to systems, locations and functions. What benefit will an RDS add if the relations already exist?

The RDS is independent of a particular computer system or software, so it will allow for easier use across all systems, companies, projects.

Q 15. If you build a new platform using RDS how will you reference pumps and transmitters in DCS graphics?

This need to be discussed in more detail, as this also involves HMI topics. If you want to discuss it more please send an e-mail to robsk@equinor.com

Q 16. It was remarked by Henrik Balslev that mapping could be made - towards I think he said supplier "system coding" ….does that mean that ISO/IEC 81346 will make relations to other coding systems that have been successfully used within business functions in oil & gas for many years (decades)…changing those well-proven coding is assumed to still to be used….or do you mean that these will not be used.. Please clarify

Well proven coding system will exist and we will not try to influence or change these. We will continue to software map towards other coding systems. There are several tag systems and they need to co-exist in the future.

Q 17. The Norwegian Building sector are going to implement RDS, but they want to try to use their old class codes (TFM) instead of the RDS-codes in part 12. Do you think that will work? -And when it doesn't, do you see any benefits in that both Norwegian Power, CW and O&G use the RDS?

No, using old TFM codes instead of -12 will not work at all. There are also definite advantages in the different sectors all using RDS. Both for software vendors, equipment suppliers, and operators.

Q 18. I notice that the Function aspect and the Product aspect share the same code tables (while the Location aspect need a separate code table). Which of the codes refer to a functional aspect and which refer to a product aspect?

The A3 booklet shows which libraries are used for the different aspects. Henrik will show it.

Q 19. Is the RDS precise/understandable enough to use for communication when working on electrical installations? E.g. for communication between operator and worker?

The RDS is more precise/understandable enough to use for communication when working on electrical installations between operator and worker. It's also more precise/understandable for communication between opeator, contractor and suppliers.

Q 20. Will this booklet/presentation be available? Where?

You can find the material available on the READI web pages: https://readi-jip.org/downloads/. The recorded presentation and answers to Q&A will be distributed later.

Q 21. For power plants, a guideline is developed with instruction how to use RDS, kind of "dummy plant break down structure" in order to secure uniform approach and use of RDS. Is similar planned for O&G?

Yes, we plan to do this as a part of implementation and user suppor

Q 22. How do we make sure that we do not end up with two objects with the same RDS?

The syntax rules of RDS ensure that the created RDS codes are unambiguous.

Q 23. Does the RDS distinguish between topside and subsea systems?

The RDS structures can be used to define topside and subsea systems, but this is not done in the classification.

Q 24. What is TFMC experience in using other classification systems that the industry already has made before, which also relates to subsea equipment?

We use some different industry classification systems for sourcing and functional location. The limitation is that they are customized for one specific use and not easy to adapt for usage on other areas. We also use the operators/clients tag system for P&ID's, Mechanical Completion and LCI, this information is used in different phases of a project, so one error made early in a project may influence several stakeholders and LCI information downstream.

Q 25. Should all levels and nodes in all aspects in a full RDS sturcture and -address hold requirements?

No, it is not needed. You may have other needs that are the basis of defining a node apart from requirements.

Q 26. Have you shared your examples with other/traditional engineers and what was their response/reaction?

The specialist team has included a broad representation of disciplines. After some initial learning the reception has been very positive.

Q 27. How do you differentiate a redundant function in the RDS?

With the function structure you can define a redundant function and map this to the same product implementing the primary function.

Q 28. What is used in presentations in SCADA-systems? +-location?

SCADA often use the functional aspect and then also reference (create relations to) locations.

Q 29. Will it be CAPEX or OPEX that can capitalize the use of technical information standard. Any views by TFMC?

We think both. Using RDS for exchanging information in execution will reduce manual work and using RDS in operation will support how information are structured and stored in a “machine readable” way, so surveillance and reuse of information for maintenance purposes and fault finding may ease or automate the work for the operator.

Q 30. Is there an overview of which engineering software systems that are 81346 certified?

ISO/IEC does not offer official certification for 81346, but most systems that can work in an object-oriented manner can support 81346 with some modification e.g. PDM, PLM, diagramming systems.

Q 31. When Robert is talking about digital requirements, is that technical/functional requirements or is it requirements for delivery of "documentation"?

It is both. The scope in the READI JIP is digitalization of LCI requirements - however it is equally applicable to technical requirements.

Q 32. How do we know if 81346 is beneficial?

Short answer: As touched upon in the presentation - it depends on the application. For "intelligent" digitalization of standard requirements it is not an alternative to use the current, multiple coding systems which are in use.

Q 33. Is an official data model available to specify what must be satisfied by an engineering software system and/or receiving information software system to facilitate working according to 81346?

The 81346 series has an accompanying information model, and READI is also working on including software vendors as part of the work.

Q 34. Are there any plans for meeting later this Autumn?

There is not scheduled any RDS-O&G meetings for the autumn, but there will be work group within the READI-JIP and it is natural to call for some kind of RDS-O&G network meeting by end Q3-2020

Q 35. In your opinion, how can we all contribute to the acceptance and prevalence of RDS O&G?

You can contribute to the acceptance and prevalence of RDS O&G by promoting it as described in the RDS O&G launch seminar in all organizations, committees and groups working with asset breakdown. In addition invite everyone to be a member of the READI JIP, we're open for new members and everyone that become a member will have influence, get more knowledge and understanding of RDS O&G.