**NorDig RoO Group**

Minutes from group meeting

**Time:** Tuesday 19th. May 2020

**Location:** Webex meeting

**Participants:** Peter Mølsted, chairman (deputy for Mac Des)

Stephan Schreiner, Dolby  
Guillaume de Keating-Hart, Samsung  
Juha Joki, Sofia Digital

# Minutes from last meeting

Minutes from NorDig RoO group meeting 05.05.2020 approved.

# Input to NorDig RoO spec. v.3.1.1

Peter: NorDig RoO spec. v.3.1.1\_Chapter 1\_draft001  
Stephan: NorDig RoO v. 3.1.1\_Audio draft011\_\_audio\_edits\_01\_without\_table

# NorDig RoO spec. v.3.1.1 Common main draft

NorDig RoO spec. v.3.1.0 common draft v006 including merge of Teletext and Subtitling draft004 and reassign of chapter and renumbering the complete document to be in line with NorDig IRD specification. The chapter numbering cannot be “one to one” to the IRD specification, but if the specifications is in line with chapter numbering as must as possible it is a help for the users of the documents and for further updates of the specifications.   
- No comments.

# Proposals and actions for NorDig RoO spec. v.3.1.1 (updated 19.05.2020) Chapter numbers are now changed to numbering as in RoO Common draft006.

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| --- | --- | --- | --- |
| **Chapter** | **Status minutes from meetings per task** | **Status** | **Owner** |
| 1. General, Scope, History, etc. | First draft for next meeting. 18.10.19: First draft to be done. 27.11.19: to be done. 11.12.19: To be done 08.01.20: To be done 08.01.20: To be done 22.01.20: To be done 05.02.20: To be done 19.03.20: draft001 included in NorDig RoO v. 3.1.0 Common main draft 005 for Excom meeting. AP/ Peter to rewrite text to NorDig RoO v. 3.1.1 Common main draft 005. 02.04.20: done 16.04.20: No comments 05.05.20: Chapter 1. Updated in Common draft006 to be in line with IRD spec. AP/ Chapter 1.2 Terminology and 1.3 Definitions must be updated. 15.05.20: Peter presented “NorDig RoO spec. v.3.1.1\_Chapter 1\_draft001” - “Shall” in chapter 1.3 to be changes from bold red text to normal black since the chapter is about definitions.  AP/Peter to update the draft with changes from the meeting. AP/ all to review the document and send comments before next meeting. | In progress | Peter |
| 12 (P)SI | First draft for next meeting. 18.10.19: First draft to be done.  31.10.19: to be done. Juha input about HbbTV signaling in Finland, document for next meeting.  13.11.19: There has been no time to work on the draft. 27.11.19: to be done. 11.12.19: To be done 08.01.20: To be done 22.01.20: No comments 05.02.20: Per have started working on the draft. 19.02.20: Expect to have draft for next meeting. 27.02.20: Postponed to step 2 updated version - autumn 2020 19.03.20: Per, draft in progress. 02.04.20: No input yet 16.04.20: Per, draft in progress, the chapter and tables will be reformatted to be in line with NorDig IRD specification.  05.05.20: Due to the Corona crisis, it has not been possible to find time to work with input to the RoO specification. 15.05.20: In progress – but no input yet. | In progress | Per, Juha |
| 3.1 Tuning and Navigation | First draft for next meeting. 18.10.19: First draft to be done.  31.10.19: to be done.  13.11.19: Richard have started working with chp. 3: - There are some overlap between this chapter and the SI chapter that have to be found solutions for. - Number of information in the chapter don’t have references to the IRD spec. but to DVB specifications and have to be checked if need to be updated. - There need information about IRD tuning and demuxing. - Error in 3.1.5 Private\_data\_specifier: LCN v1 or v~~1~~2  AP/ Richard continues with the draft work.  27.11.19: no time to make first draft. 11.12.19: To be done 08.01.20: In progress, but no draft ready yet. 22.01.20: In progress, but no draft ready yet. 05.02.20: No comments 19.02.20: No comments 27.02.20: No input 19.03.20: No input Nicholas has agreed to participate in the work on this chapter. 02.04.20: No input yet.  Peter will participate in the work on this chapter. AP/ Peter to create draft doc. and send to Richard and Nicholas 16.04.20: In progress but no input yet. 05.05.20: Due to the Corona crisis, it has not been possible to find time to work with input to the RoO specification. 15.05.20: In progress – but no input yet. | In progress | Richard,  Nicholas, Peter, Guillaume |
| 5. Video transmission | First draft for next meeting. 18.10.19: First draft to be done.  31.10.19: to be done.  13.11.19: There has been no time to work on the draft.  27.11.19: to be done. 11.12.19: To be done 08.01.20: In progress, but no draft ready yet. 22.01.20: In progress, but no draft ready yet. 05.02.20: No comments 19.02.20: No comments 27.02.20: No input 19.03.20: No input Nicholas has agreed to participate in the work on this chapter. 02.04.20: No input yet.  Peter will participate in the work on this chapter. AP/ Peter to create draft doc. and send to Richard and Nicholas 16.04.20: In progress but no input yet. 05.05.20: Due to the Corona crisis, it has not been possible to find time to work with input to the RoO specification. 15.05.20: In progress – but no input yet. | In progress | Richard,  Nicholas, Peter,  Guillaume |
| 6. Audio transmission | First draft for next meeting. 18.10.19: First draft to be done. Jonas have an audio draft made by Dolby in 2018, which can be used as a starting point for updating the audio section.  In working with IRD v 3.1.1 spec. a number of notes were made for RoO which can also be used.  AP/ Peter to send latest IRD draft including RoO notes.  31.10.19: Stephan have reviewed the old draft (NorDig Rules of Operation\_ver\_3.1\_audio\_draft004\_20181204\_Dolby\_WorkingDraft) a part can be used as starting point. AP/first draft to be done AP/ Juha, to send information about SI for handling multi language in Finland.  13.11.19: There has been no time to work on the draft, but the work will be continued next week. AP/ First Audio draft ready for next meeting.  27.11.19: Stephan: NorDig\_audio\_additions\_20191119 (Audio draft001). The Audio draft was review and discussed at the meeting. All comments and changes were included in the document during the meeting. AP/ Stephan to send updated Audio draft002 including changed and comments from the meeting.  AP/ Stephan and Johan to make updated Audio draft003 for next meeting.  11.12.19: Stephan: NorDig RoO ver\_3.1.1\_Audio draft003. This Audio draft including audio related items outside the audio chapter. Draft reviewed and edited at the meeting. AP/ Stephan to send updated Audio draft003 with changes from the meeting to Peter. AP/Peter to merge updated Audio draft to the Common draft.  Chapter 5. Audio Transmission: Stephan presented the work in process with audio chapter and major items was discussed. AP/ Stephan chapter 5. Audio Transmission first draft for next meeting.  08.01.20: Stephan are working on chapter 5. Audio Transmission, first draft for next meeting. 22.01.20: In progress, plan to have draft ready for next meeting.  05.02.20: Stephan: NorDig RoO ver\_3.1.1\_Audio draft005 (NGA not included) The draft was reviewed and commented at the meeting.  AP/ Stephan: send Audio draft005 updated from the meeting, to the group for comments.  AP/ all: comment on Audio draft005 (updated version from the meeting) before next meeting.  Stephan and Johan expect to have a draft for the NGA part ready for next meeting.  19.02.20: Stephan presented Audio draft007 – chapter 5 including NGA. - New section 5.1.5 on Supplementary Audio” (moved from previous signaling section) - New section 5.3.1 on PID assignment - Bitrates for codecs are under discussion – not finalized - Added signaling sections (language and SAD)  Audio draft007 was reviewed and edited during the meeting, major updates and changes was approved. AP/ Stephan to send updated Audio draft007 with changes from the meeting to the group for comments.  27.02.20: Stephan, Audio draft008 (new) not been shared before. 5.1.1 added AC4 – Ok 5.1.3 added Mushra listn. Test text (from d007) – Ok 5.1.4 note – Ok 5.1.4 div. text – Ok 5.1.5 div. text – Ok with some small changes 5.2.1 move text about NorDig profiles to beginning of RoO, to be moved up to before section 5 – Ok AP/ Peter, to remember to “copy” in section 1 or Intro. 5.2.2 bitrates etc. – some new changes – Ok 5.2.3 bitrate table - some new changes – Ok 5.2.4 AAC – some new changes to parametric stereo. AP/ Stephan, to implement new text before sending to Group / Peter 5.2.5 AC4 new Not managed to go through all new text at the meeting. AP/ Stephan, to continue drafting to d009 during afternoon 27.02.20 AP/ Stephan, to share d009 including changes from the meeting. AP/ All, very fast comments on green text before Friday lunch 28.02.20, if no comments then accepted (mark text yellow) . AP/ Peter, to include draft009 into RoO comment d005. 19.03.20: Audio draft010 (updated after last meeting) have been merged in to Common main draft005. AP/ Stephan, review Audio chapter in Common main draft005. 02.04.20: Stephan, the Audio chapter have been reviewed by technicians in the organization and they have some minor changes. AP/Stephen, minor updates for the Audio chapter for next meeting. 16.04.20: Stephan, Common main draft005 Audio part are in review internally in Dolby, expect to have feedback for next meeting (minor updates).  Johan propose to include “Dolby metadata guide” as reference document in the RoO specification. AP/ Stephan to check if the “Dolby metadata guide” still is publicly available so we can use it as reference document.  Johan: Spoken subtitles is a RoO challenge when having many different IRDs in the market with not always complete implementation.  It was discussed if chapter 5.2.1 Implementation of Supplementary Audio need to be updated, including how Spoken subtitles and other audio accessibility services are handled with NGA. AP/ Johan and Stephan to review chapter 5.2.1.  05.05.20: no input, due to the Corona crisis, it has not been possible to find time for final review of the Audio part. 15.05.20: Stephan presented Audio draft011, (updated after Dolby interne review. - Updated Audio draft011 was reviewed – all changes agreed. AP/ Stephan to updated draft012 with minor changes and send it to the group. | In progress | Stephan, Jonas, Johan |
| 10 System software update | First draft for next meeting. 18.10.19: First draft to be done. SSU via internet including security to be included in RoO.  31.10.19: to be done.  13.11.19: There has been no time to work on the draft.  27.11.19: to be done. 11.12.19: To be done 08.01.20: To be done 22.01.20: No input. Nicholas will participate in the work with the System software update chapter. 05.02.20: To be done 19.02.20: No comments 27.02.20: No input 19.03.20: No input 02.04.20: No input yet. 16.04.20: Comments. 05.05.20: Due to the Corona crisis, it has not been possible to find time to work with input to the RoO specification. 15.05.20: In progress – but no input yet. | In progress | Per, Juha, Nicholas |
| 7. Teletext and Subtitling | 05.05.20: Teletext and Subtitling draft004 merged in to Common main draft006. | Done | Peter, Per, Kjell |
| 14 PVR | AP/ Peter to merge PVR draft v.002 in to NorDig RoO v.3.1.1 common draft 003.  27.11.19: done. | Done | Peter |
| 9. Conditional access | First draft for next meeting. 18.10.19: First draft to be done.  31.10.19: to be done.  13.11.19: There has been no time to work on the draft.  27.11.19: to be done. 11.12.19: To be done 08.01.20: To be done 22.01.20: No comments 05.02.20: No comments 19.02.20: No comments 27.02.20: No input 19.03.20: No input 02.04.20: No input yet.  Peter will participate in the work on this chapter. AP/ Peter to create draft doc. and send to Per 16.04.20: In progress but no input yet. 05.05.20: Due to the Corona crisis, it has not been possible to find time to work with input to the RoO specification. 15.05.20: No comments. | To be done | Per |
| 15. API - HbbTV | First draft for next meeting. 18.10.19: First draft to be done.  31.10.19: AP/ Juha first draft for next meeting.  13.11.19:  Juha: input by mail: A new development in Finland where we are putting HbbTV apps on encrypted channels as well. During testing it was noticed that encrypted AIT won’t work on all devices – and there’s mention about it in the spec, that it’s not required.  Juha will write in the RoO mentioning that while A/V can be encrypted, AIT will be in the clear. AP/ First draft ready for next meeting  27.11.19: no time to make first draft.  11.12.19: Juha: NorDig Rules of Operation\_ver\_3.1.1\_HbbTV draft002. All proposals in the draft approved. - need text about DVB Dash. - to be checked if need more text about DRM. - Broadband services to be included.  AP/ Juha updated HbbTV draft for next meeting. 08.01.20: Juha could not attend the meeting. Topic to be addressed at the next meeting. 22.01.20: No input. Nicholas will participate in the work with the API - HbbTV chapter. 05.02.20: No input. 19.02.20: No comments 27.02.20: No input 19.03.20: No input 02.04.20: No input yet. 16.04.20: No comments 05.05.20: Due to the Corona crisis, it has not been possible to find time to work with input to the RoO specification. 15.05.20: Juha will review and if need update the old draft “NorDig Rules of Operation\_ver\_3.1.1\_HbbTV draft002. AP/Juha to send updated draft to the group before next meeting | In progress | Richard, Juha, Nicholas |
| 1. References | To be updated ongoing in the working process. 18.10.19: no comments 27.11.19: no comments. 11.12.19: Common main draft to be updated with references from Audio draft003 (including changes from this meeting).  08.01.20: Common main draft v004 updated with references list from IRD spec. as agreed at last meeting. 22.01.20: No comments 05.02.20: No comments 19.02.20: No comments 27.02.20: No input 19.03.20: No input 02.04.20: No comments 16.04.20: See chapter 5. Audio transmission 05.05.20: Chapter moved to Chapter 1.4. 15.05.20: AP/ Peter to update with 2 new references from Audio chapter. | In progress | All |
| Appendix | 18.10.19: no comments.  31.10.19: CRID Types moved from ch. 8.2.1 to Appendix A – approved.  27.11.19: no comments. 11.12.19: no comments. 22.01.20: No comments 05.02.20: No comments 19.02.20: No comments 27.02.20: No input 19.03.20: No input 02.04.20: No comments 15.05.20: No comments 16.04.20: No comments 05.05.20: No comments | In progress | All |

# Drafts for RoO v.3.1.1, latest versions and documents:

NorDig Rules of Operation ver. 3.1.1 Common draft006  
NorDig Rules of Operation\_ver\_3.1.1\_HbbTV draft002  
NorDig Rules of Operation\_ver\_3.1.1\_Teletext and Subtitling draft004\_Per T  
NorDig RoO ver\_3.1.1\_Audio draft011\_\_audio\_edits\_01\_without\_table  
NorDig RoO ver\_3.1.1\_Chapter 1 draft001

# Time plan for release of NorDig RoO v.3.1.1

Time plan approved by Excom at meeting March 3, 2020:   
NorDig RoO v. 3.1.1 final draft, completely updated and adapted in design corresponding with the IRD Unified specification, ready for approval at Excom meeting October 8, 2020 and release just after the meeting.

- To be able to meet that schedule NorDig RoO v. 3.1.1 Common draft we must be 99% finished before summer vacation. This means that we must have a final draft ready by the end of June, so that we in the group only need to check for minor errors at the end of August before send it to NorDigT for approval.  
  
Workplan for the RoO Group:

* Ultimo June: NorDig RoO v. 3.1.1 Common draft 99% finished.
* Ultimo August: NorDigT, NorDig RoO v. 3.1.1 final draft to be send to NorDigT for approval at NorDigT meeting 1th. September.
* (If needed possible to fix errors and to get updated version approved at NorDigT meeting 29th September).
* Primo September: NorDig RoO v. 3.1.1 final to be send to Excom for approval at Excom meeting 8th. October.
* Ultimo October: Release of NorDig RoO v. 3.1.1.

# Meetings

Telco / Webex meeting, Tuesday 2th June from 10.00 to 12.00 CET.  
Telco / Webex meeting, Tuesday 16th June from 10.00 to 12.00 CET.  
Telco / Webex meeting, Tuesday 30th June from 10.00 to 12.00 CET.

*Informative:   
NorDig T meeting, 26th. May 2020.  
Excom meeting, 8th. October 2020.*

**Note**: meeting minutes, updated Working document and other relevant documents will be uploaded at the NorDig website (nordig.org) at member’s area in RoO Group documents.  
<https://nordig.org/groups/roo-group/documents/>