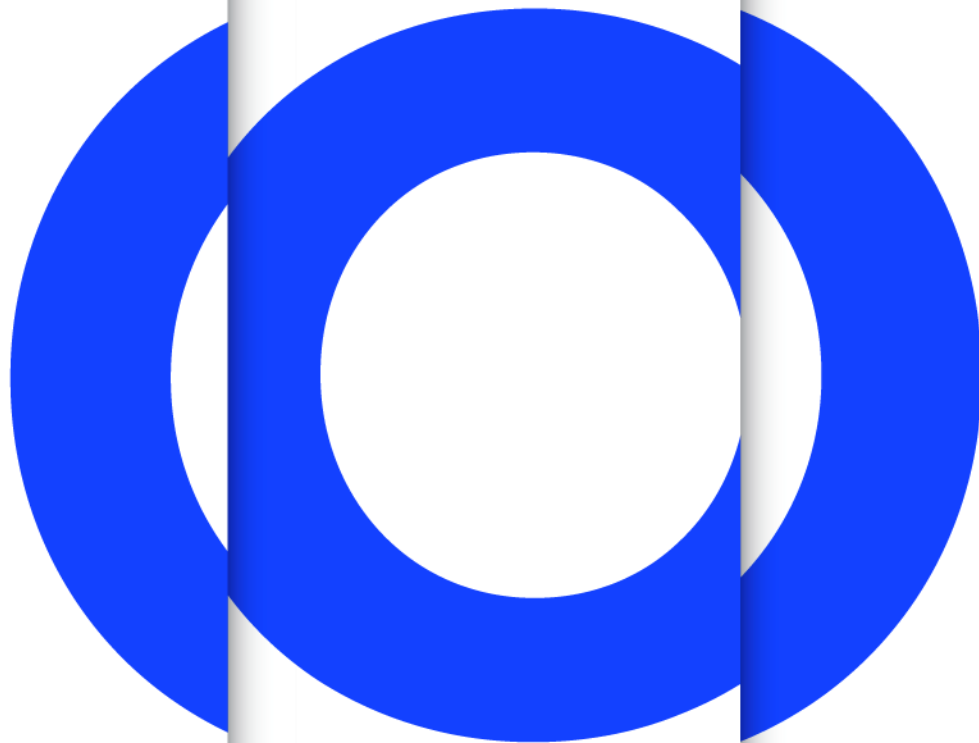


EBU

OPERATING EUROVISION AND EURORADIO

Nordig TV-Anytime workshop
Copenhagen,
Boxer TV
30th November 2017



The TV-Anytime Forum

Founded in September 1999

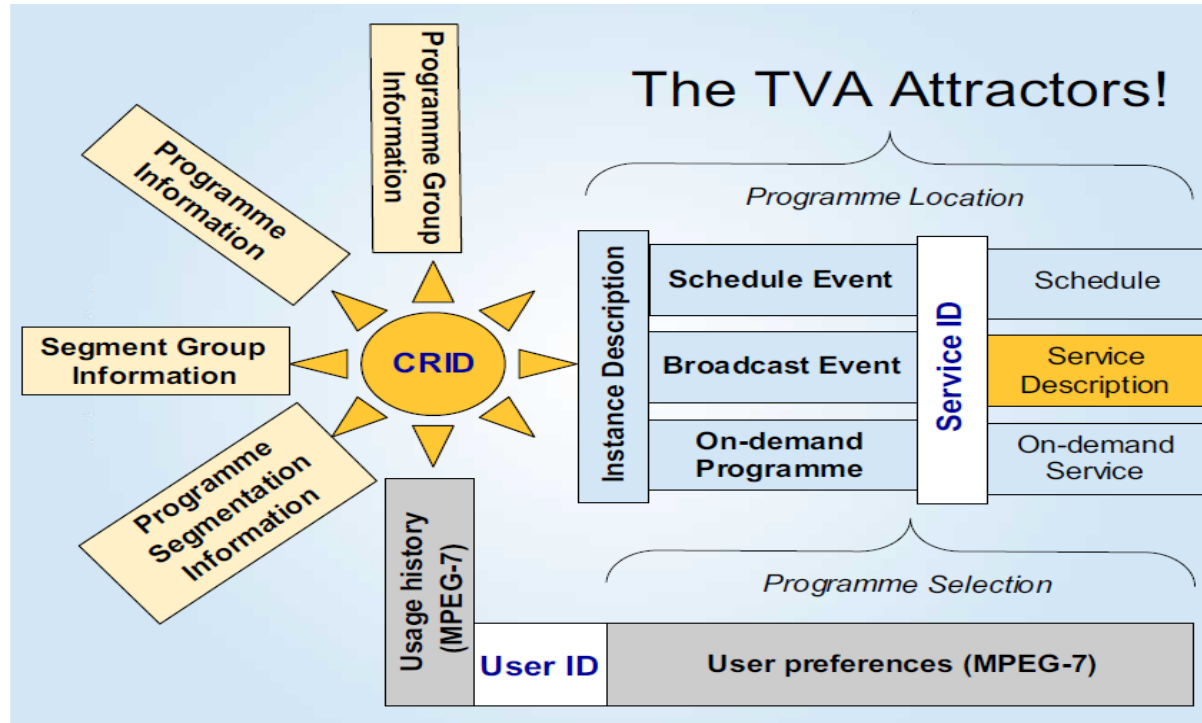
- 40 companies from Asia, Europe and USA
- Content providers, CE manufacturers, broadcasters, telecom operators, etc.
- Some additional background information
 - ✓ XML was in its infancy
 - ✓ The vision was around lost-cost content storage (only really happening now)
 - ✓ Bi-directional was meant using a "return-path" to a data web-services in complement to unidirectional distribution

TV-Anytime scope

- PVR-based applications in a uni-directional broadcast environment
- Enable search, selection, acquisition and rightful use of audio and video
- Early personalisation and recommendation using user profiles through return paths to data service providers
- Specifications (Phases 1 & 2) finished in 2005
- Although originally targeting PVRs, all TV-Anytime concepts can be extended to new services like catch-up TV, other OTT services and of course personalisation and recommendation.

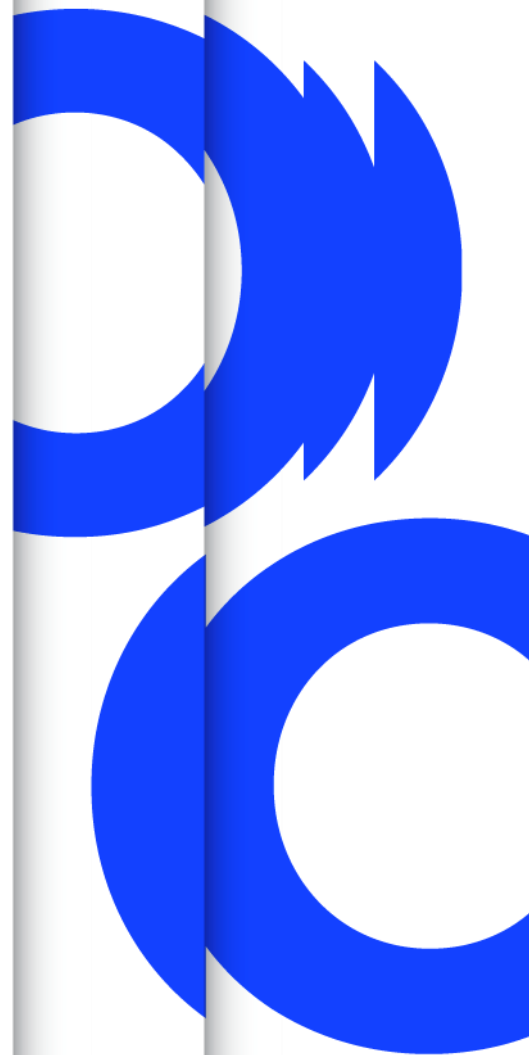
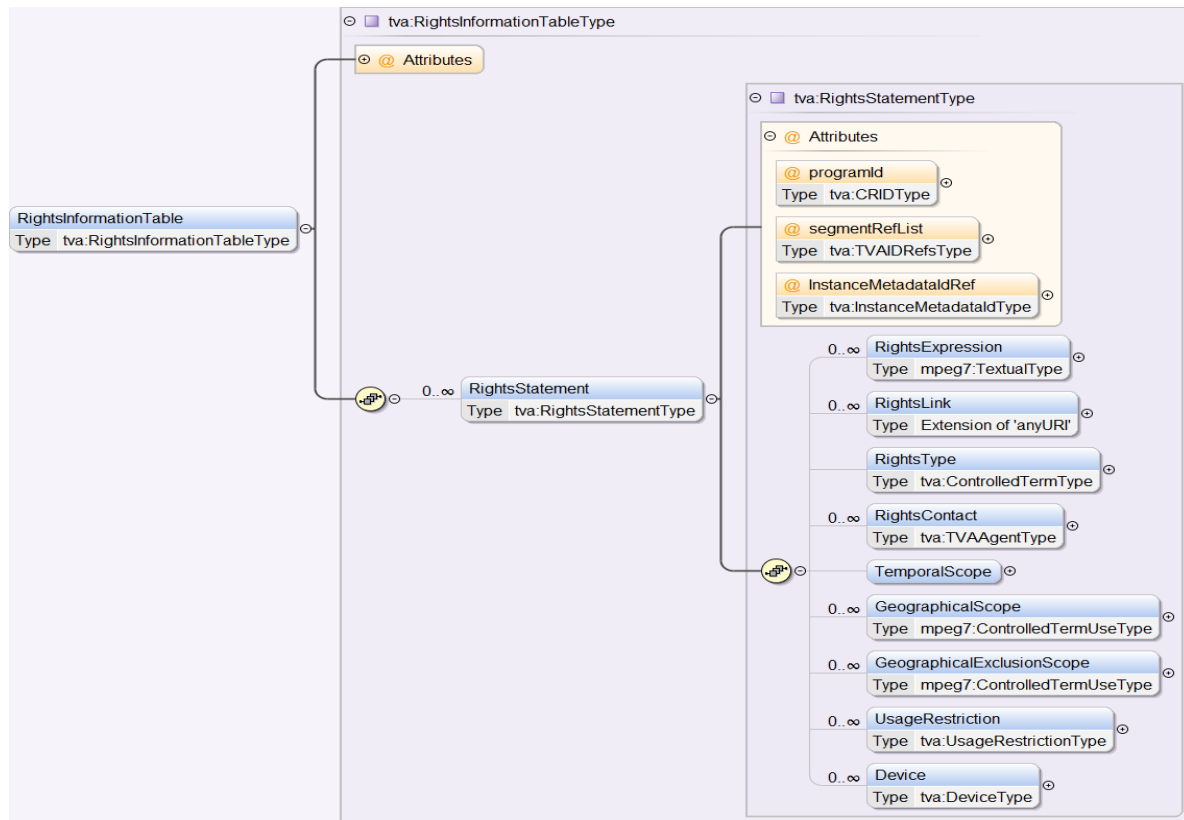


TV-Anytime in a nutshell

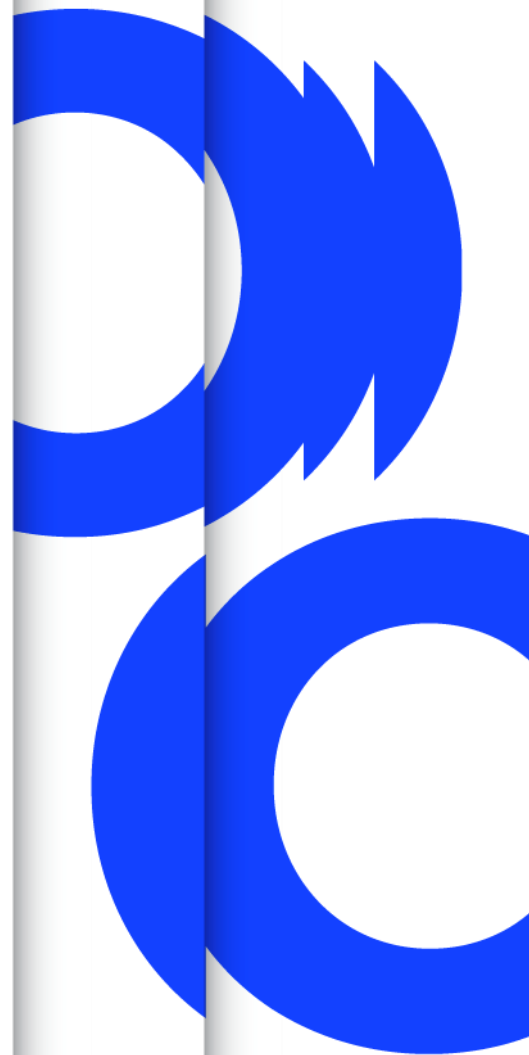
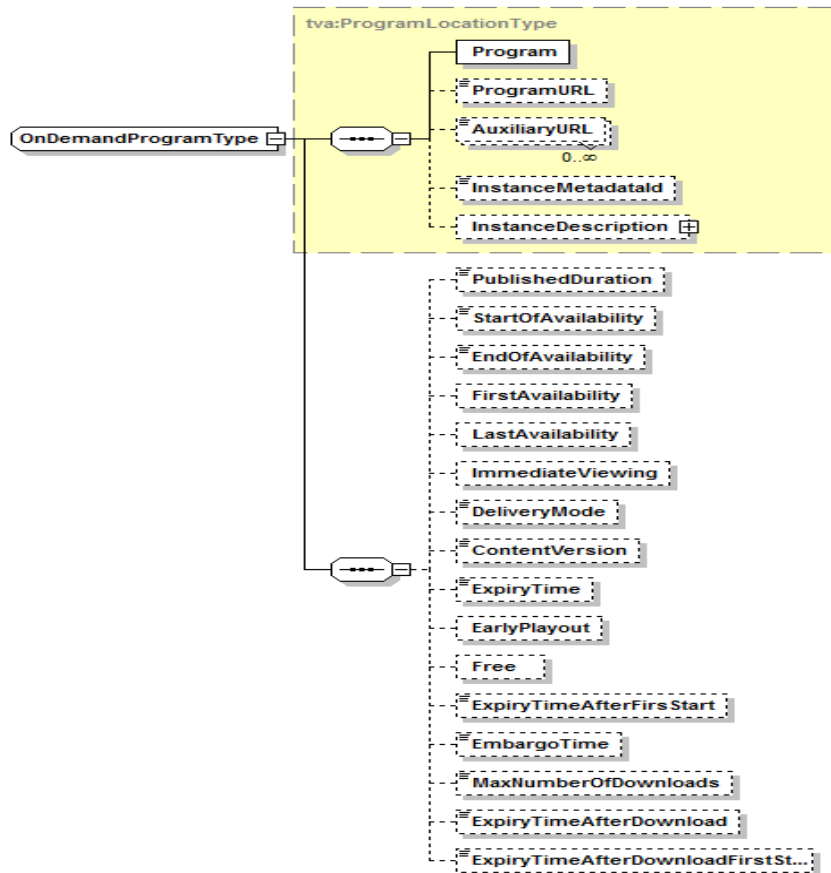


Ahead of its time: all organised around IDs

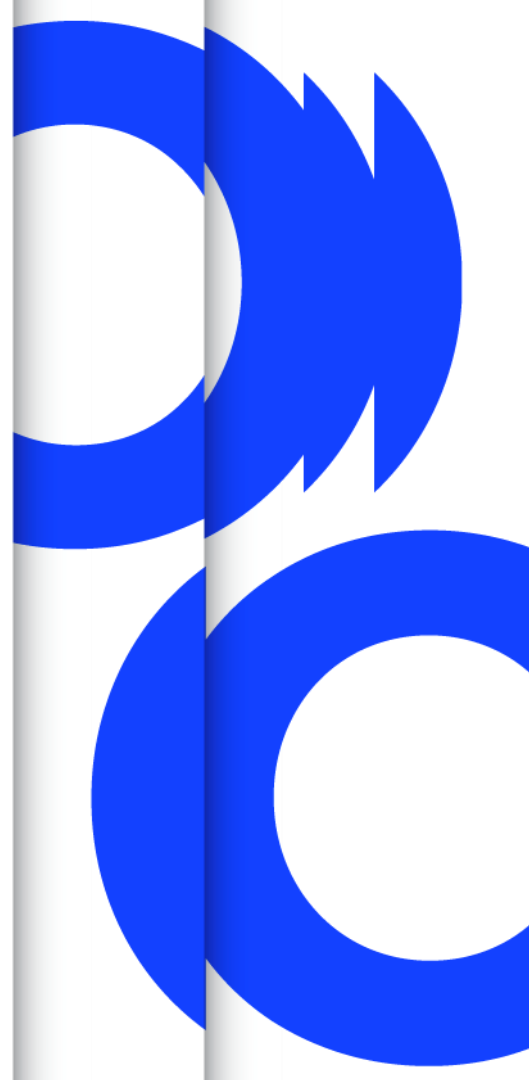
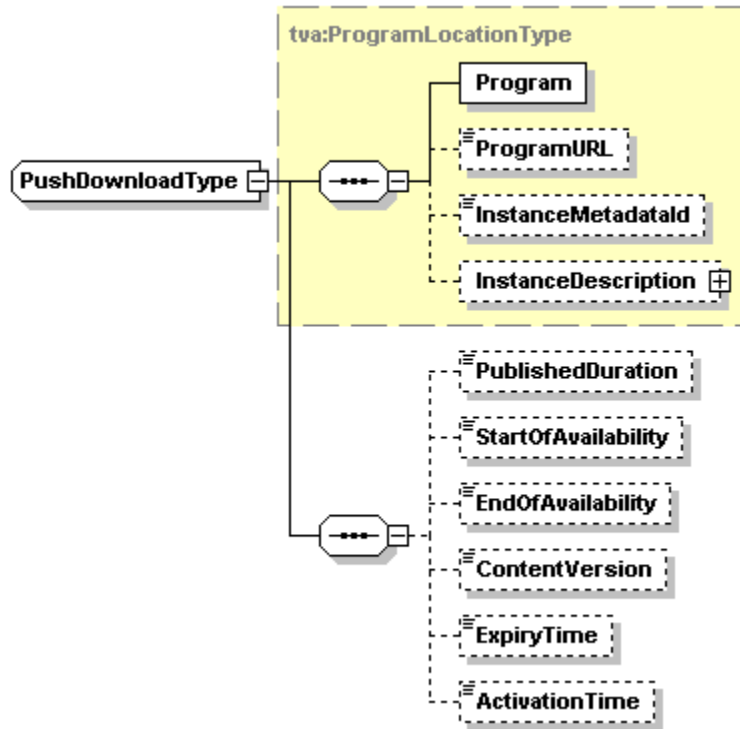
Nordig updates in 2017 (1)



Nordig updates in 2017 (2)

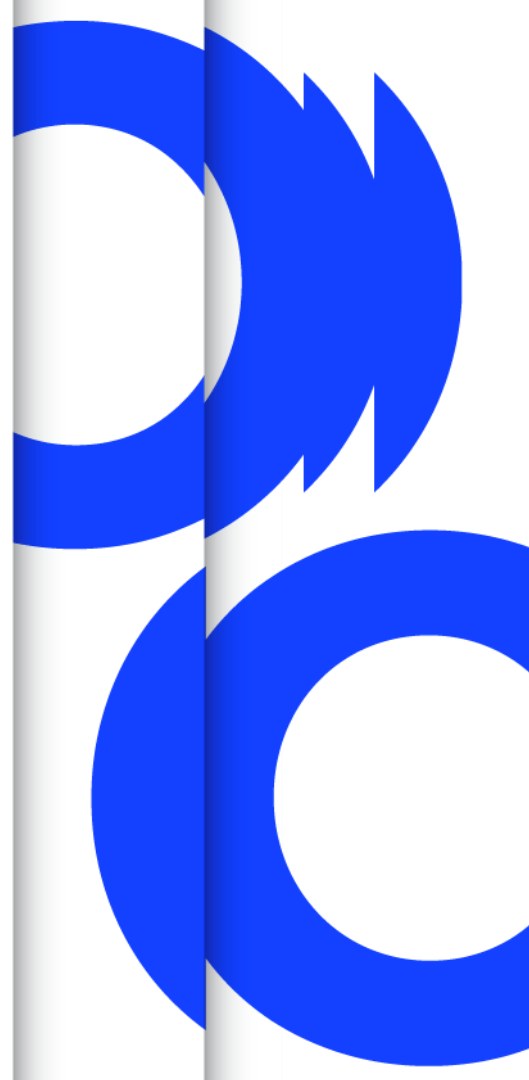


Nordig updates in 2017 (3)



TV-Anytime specifications in ETSI

- TS 102 822-1 / Benchmark features
- TS 102 822-2 / System description
- [TS 102 822-3-1 / Phase 1 metadata schemas \(Nordig\)](#)
- TS 102 822-3-2 / Unidirectional environments
- TS 102 822-3-3 / Phase 2 extended metadata schemas
- TS 102 822-4 / Phase 2 interstitial metadata
- TS 102 822-5 / Rights management and protection (RMP)
- TS 102 822-5-1 / RMP for broadcast
- TS 102 822-5-2 / RMP information binding
- TS 102 822-6-1 / Metadata over a bi-directional network
- TS 102 822-6-2 / Service discovery
- TS 102 822-6-3 / Phase 2 exchange of personal profile
- TS 102 822-7 / Bi-directional delivery protection
- TS 102 822-8 / Interchange data format
- TS 102 822-9 / Remote programming



Useful links

- <https://tech.ebu.ch/tvanytime>
 - Replaces <http://tv-anytime.org/> obsolete since several years
- <http://www.etsi.org>
 - Search and browse standards
 - Search for "TS 102 822"
 - Look for [ETSI TS 102 822-3-1 V1.10.1 \(2017-09\)](#), PDF ans schemas
- <https://tools.ietf.org/html/rfc4078> - CRID as an IETF RFC
- Contact: Jean-Pierre Evain, EBU (evain@ebu.ch)

