indra

AIR TRAFFIC MANAGEMENT

NEPTUNO

Recording Solution for Air Traffic Management

NEPTUNO

Neptuno records and plays voice communications and the consoles used in Air Traffic Management

Description

Neptuno is an Indra recording solution for Air Traffic Management (ATM). It records and replays the communications of the control centers and operator's consoles with accuracy and full availability. It has successfully proved its highest availability in more than 255 sites on five continents where it has been installed.

Flexibility

Neptuno is a modular recording solution that fulfills specific requirements of each user. Indra is developer and manufacturer of Neptuno system what makes possible to perform changes and add any functionality requested by the user.

Neptuno is presented with the following modules:

- AR – Audio Recording
- CR – Console Recording
- MR – Multimedia Replay System
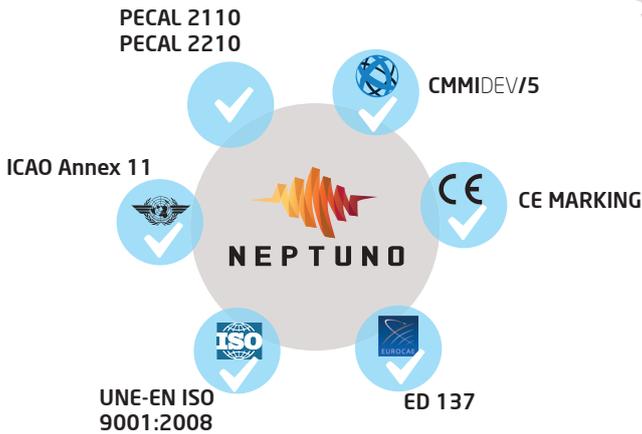- VM – Virtualized solution of any of the above.

Usability

Neptuno includes several tools in order to facilitate the user tasks:

- Web Interface
- Centralized Management
- Customizable reports
- Integration with external systems
- Scalable
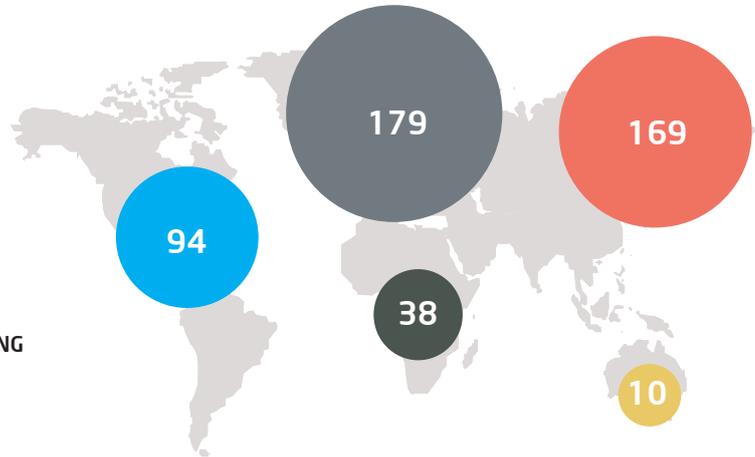- Synchronized playback and export of audio and consoles

High availability

Neptuno is developed according to the strictest quality standards that are applicable (both civilian and military). It has several redundancy levels ensuring high availability and security of the recordings.

PECAL 2110
PECAL 2210

CMMIDEV/5

ICAO Annex 11

NEPTUNO

CE MARKING

UNE-EN ISO
9001:2008

ED 137

References

24x7x365 on five continents

179

169

94

38

10

Technical specifications

Recording interfaces

Digital:

Audio
- E1/T1
- ISDN/Q931
- VoIP
  - ED-137B
  - RTSP/RTP
  - Standard SIP 2.0

Consoles
- Video resolutions up to 3840×2160
  - DVI
  - Display port
  - HDMI

Analogue:

Audio
- Audio systems: Balanced lines of 2 or 4 wires
- Telephony systems: FSX/FSO

Consoles
- VGA

Proprietary networks:

Audio
- Avaya
- CISCO
- Nortel
- TETRAPOL

Storage formats

Audio
- PCM16 y PCM8 (uncompressed).
- G.711 (Alaw and µLaw).
- G.726 (32kbits/s bitrate).
- G.729 (Annex A and B).

Consoles
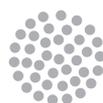- H264 encapsuled in MKV and AVI

Backup system

- RDX
- Remote storage servers (NAS or SAN)
- iSCSI or USB hard disk

Security

- Encrypted storage
- Watermark and digital signature
- Impound player
- Secure communications
- Audit

Indra

AENOR

ER

Empresa
Registrada
ER-0682/1996

ISO 9001:2000

CERTIFIED
IQNet
QUALITY SYSTEM