ECR/Documents for Information and Approval

Giulia Romagnoli and Natalya Kahn for BE-EA, 2024-08-13

EA Documents - Agile Board - CERN Central Jira

LIST OF DOCUMENTS for Info

FOR INFORMATION EATM				
Summary	**Reporter**	**EA Projects**	**EDMS number**	**EDMS Status**
ILC Beam Dump - Water Tank	Krystian Sidorowski	North Area, NACONS	3101516 - SPSX-T-RPT-0001	**Engineering check**
Consolidation of the Beam Intercepting Devices Cabling and Controls of the North Experimental Area	Jerome Lendaro	North Area, NACONS	2488118 - SPSX-C-WD-0001	**Under Approval**
ODH Risk Assessment for the underground gallery of EHN1	Havin Ozcanli	North Area, NACONS	1728885 – SPSX-S-RPT-0003	**Under Approval**
Introduction to the North Area Safety File	Havin Ozcanli	North Area, NACONS	3121018 – SPSX-S-SR-0002	**Engineering check**
System Safety Assessment - XWCM/XSCI	Krystian Sidorowski	North Area, NACONS	3140740 - SPSX-B-SSR-0001	**Engineering check**
Functional Specification for the Power Converters for the AD Electron Cooler	Yves Thurel	AD	3140648 - AD-LNT-SPC-0004	**Engineering check**

ECR for Information

CRN-S-EC-0003
Version **0.2**

By Aurelie Pascal

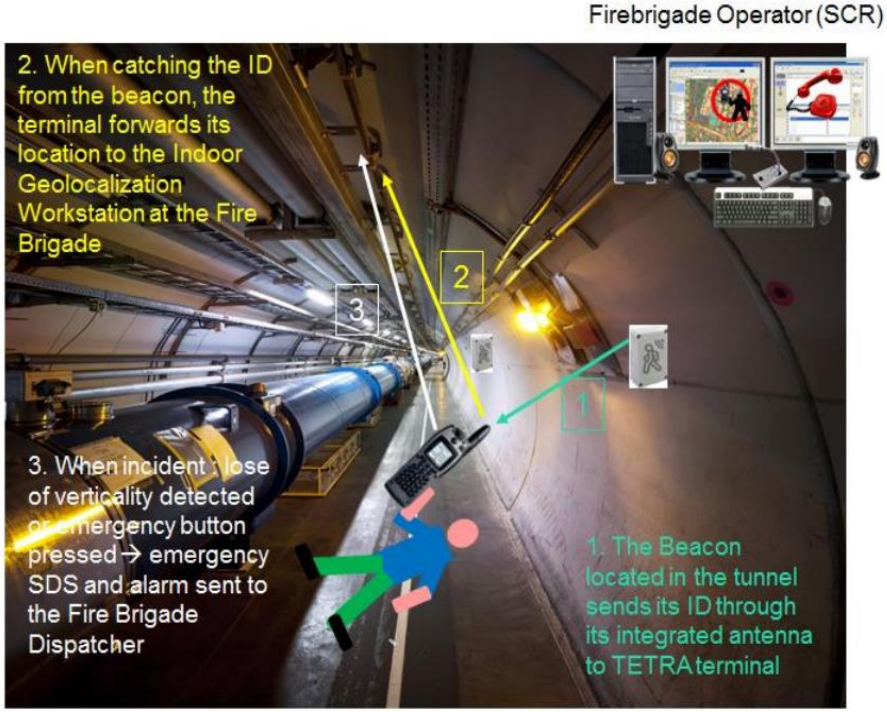
Decommissioning of the beacons used for the Indoor Localization System (ILS)

This document covers the decommissioning of the beacons that were initially installed to geolocate TETRA radio users underground. The TETRA radio system is currently operated without this function and will remain operational in its current form.

Around 1000 beacons were deployed to geolocate users carrying a TETRA terminal.
However, it was found that the beacons and their electronic components could not withstand radiation. The indoor localization system could not be used in the underground installations and must be decommissioned.

The modus operandi would be to:

- Remove the beacon from its location (unscrew, cut the flanges with pliers)
- Sort the waste into separate bags (1: beacon + metallic support, 2: screws, nuts and metallic flanges)
- Bring them to the buffer zone
- Register them in TREC for an RP check
- After the check
    - If they are not radioactive, they will be transported to B58 or B513 for dismantling before recycling (B133)
    - If they are radioactive, they will be moved to a specific storage area



ECR for Information

CRN-S-EC-0003
Version **0.2**

By Aurelie Pascal

Decommissioning of the beacons used for the Indoor Localization System (ILS)

In AD, 23 beacons were deployed and will be removed.

They are either:
- Screwed to metallic nuts wedged into interstices of the concrete wall (case 1)
- Attached to cable trays, telex or fences via flanges or screws (case 2)
- Screwed into the wall (case 5)

Figure 35: case 2 close view

Figure 36: case 2 far view

Figure 33: case 1 close view

Figure 34: case 1 far view

Figure 41: case 5 close view

Figure 42: case 5 far view

ECR for Information

CRN-S-EC-0003
Version **0.2**

By Aurelie Pascal

Decommissioning of the beacons used for the Indoor Localization System (ILS)

In the North Area, 18 beacons were deployed and will be removed.

They are either:

- Screwed to metallic nuts wedged into interstices of the concrete wall (case 1)
- Attached to cable trays via flanges (case 2)
- Screwed into the wall (case 3).

Figure 55: case 2 close view

Figure 56: case 2 far view

Figure 53: case 1 close view

Figure 54: case 1 far view

Figure 57: case 3 close view

Figure 58: case 3 far view

LIST OF DOC for FUTURE APPROVAL

ECR INFO/FUTURE APPROVAL EATM				
Summary	**Reporter**	**EA Projects**	**EDMS number**	**EDMS Status**
BA80 Fire Detection Equipment	Florian Andre Deperraz	North Area – NACONS	2997829 - SPSX-SF-EC-0005	**Under Approval**
Asset Replacement Request - TT84 Ventilation	Helmut Jena	North Area – NACONS	3139745 - SPSX-U-ARR-0003	**Under Approval**
EHN1 Workshop Refurbishment	Iliasse Derrag	North Area – NACONS	3089621 - SPSX-J-EC-0005	**Engineering check**
BA81 Building Extension	Rachid Haddad	North Area – NACONS	3093423 - SPSX-SF-EC-0009	**Engineering check**
Protection Against Accidental Contacts for Normal Conducting Magnets in the NA	Olivier Crettiez	North Area – NACONS	3124339 – SPSX-M-EC-0004	**Engineering check**
User Requirement for the XABS Absorbers in M2 Line in North Area	Dipanwita Banerjee	North Area – NACONS	3012379 – SPSX-T-ES-0007	**In Work**
User Requirements for XTAX Absorbers in North Area Beamlines	Miguel Lino Diogo Dos Santos	NACONS, Equipment	2747997 - SPSX-T-ES-0003	**In Work**
Installation of Multi-Wire Proportional Chamber (MWPC) in IRRAD Zone 1	Federico Ravotti	East Area	3136064 – PSZ-B-EC-0006	**Engineering check**

LIST OF DOCs for APPROVAL

ECR APPROVAL EATM				
Summary	**Reporter**	**EA Projects**	**EDMS number**	**EDMS Status**
Installation of XCET Detectors and Scintillating Fibers Monitors in Neutrino Platform	Jan Buesa Orgaz, Giulia Romagnoli	North Area – NACONS	2811758 - SPSX-X-EC-0001	**Under Approval**
CESAR NA-CONS Renovation - virtual Device Server Consolidation Plan	Maciej Peryt	North Area – NACONS	3095571 - SPSX-C-EC-0002	**Under Approval**

ECR for Approval

SPSX-X-EC-0001
Version **0.2**

By Giulia Romagnoli

Installation of XCET Detectors and Scintillating Fibers Monitors in Neutrino Platform

This document describes the changes required for the installation of 4 XCET detectors, 2 XBTF and 2 XBPF monitors in the Neutrino Platform at the end of H2 and H4 beamlines in EHN1 building. Some infrastructure changes are needed prior to this installation.

EHN1 (887) BUILDING

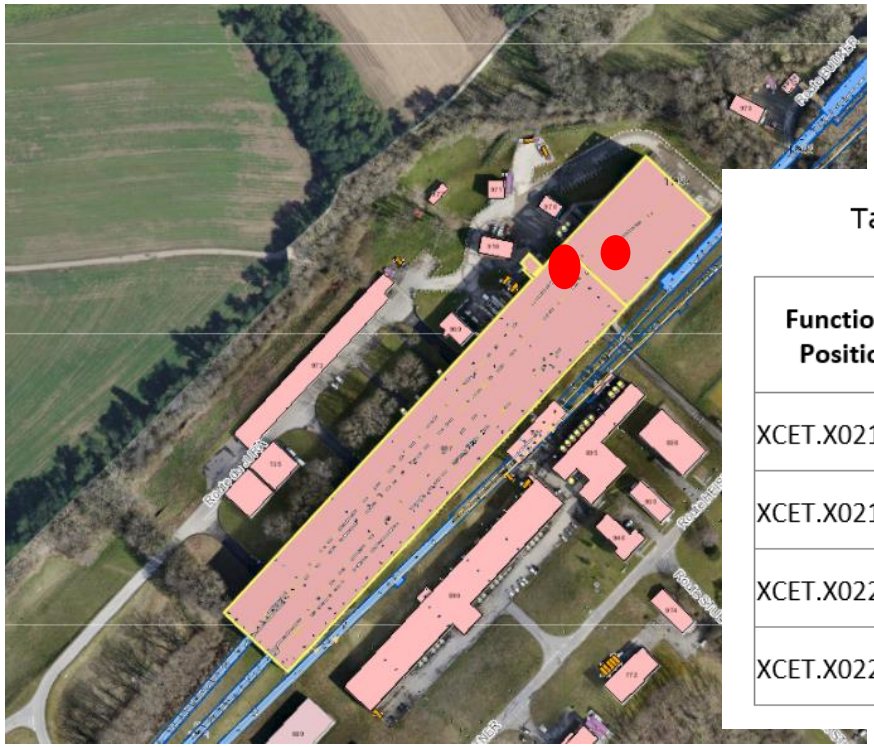


Table 2 - Technical details of the XCET of the Neutrino Platform.

Functional Position	Technical Drawing	Pressure (bar (g))	Diameter (mm)	Length Chamber (mm)	Pressure Category	Gas Type
XCET.X0210667	SPSXBH2_0050	15	213,8 (DN219)	1981	III	CO2/R134a/R218
XCET.X0210669	SPSXBH2_0049	5	213,8 (DN219)	1981	II	CO2/R134a/R218
XCET.X0220713	SPSXBH4_0064	15	213,8 (DN219)	1743	III	CO2/R134a/R218
XCET.X0220716	SPSXBH4_0062	5	213,8 (DN219)	1649	II	CO2/R134a/R218

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SPSX-X-EC-0001
Version **0.2**

By Giulia Romagnoli

Installation of XCET Detectors and Scintillating Fibers Monitors in Neutrino Platform

SUMMARY OF THE ACTIONS TO BE UNDERTAKEN:

- Installation of 4 XCET, 2 XBPF and 2 XBTF on H2 and H4 beamlines
- Installation of 2 portes grillagées
- Installation of metal sheet shielding at the end of PPE 182
- Displacement of patrol box in PPE 182 and installation of new light
- Block the access to the ladder for the NP04 Platform

Figure 4: Infrastructure changes needed in PPE 182 (version before changes).

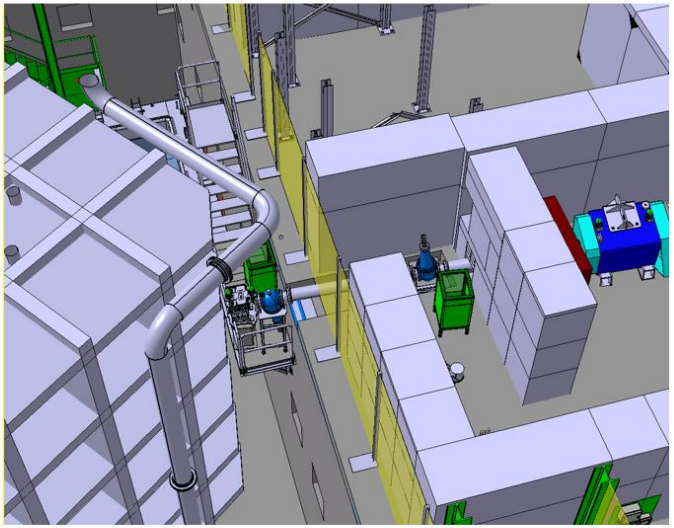

Figure 3: Overview of XCET.X0210667, XCET.X0210669, XBPF.X0210670 and XBTF.X0210670 in H2 line.

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SPSX-X-EC-0001
Version **0.2**

By Giulia Romagnoli

Installation of XCET Detectors and Scintillating Fibers Monitors in Neutrino Platform

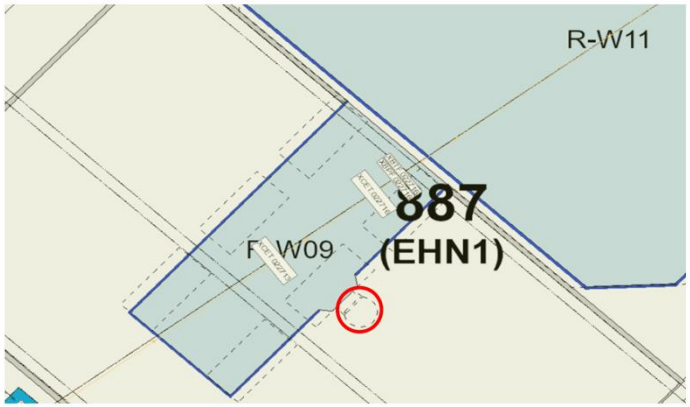

Figure 10: Access limitation for XCET detectors in H4 beamline.

SUMMARY OF THE ACTIONS TO BE UNDERTAKEN:

- Installation of 4 XCET, 2 XBPF and 2 XBTF on H2 and H4 beamlines
- Installation of 2 portes grillagées
- Installation of metal sheet shielding at the end of PPE 182
- Displacement of patrol box in PPE 182 and installation of new light
- Block the access to the ladder for the NP04 Platform

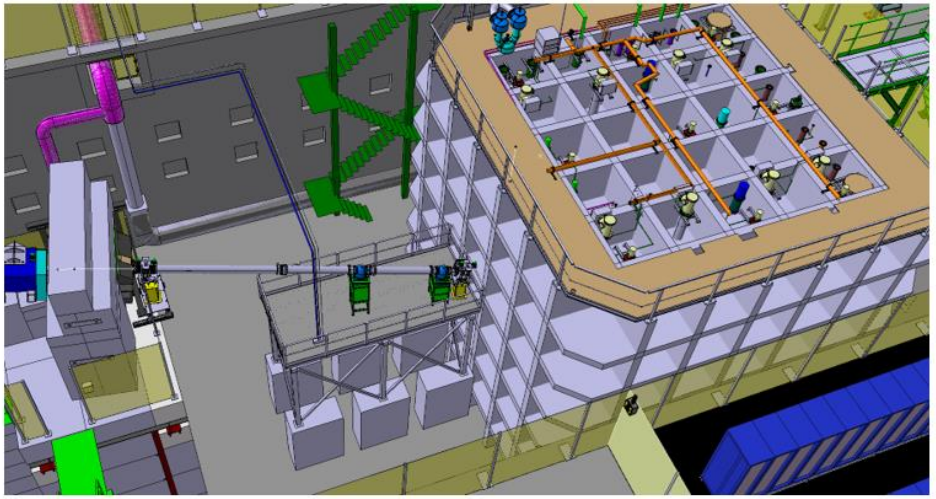

Figure 1: Overview of XCET.X0220713, XCET.X0220716, XBPF.X0220716 and XBTF.X0220716 in H4 line.

ECR for Approval

SPSX-X-EC-0001
Version **0.2**

By Giulia Romagnoli

Installation of XCET Detectors and Scintillating Fibers Monitors in Neutrino Platform

✔ **Accepted** by **GIROD Sylvain** (BE-EA)
ok

Seen by **GENILLON Xavier** (SY-EPC)
Seen

✔ **Accepted** by **VENDEUVRE Camille** (BE-GM)
Figure 7 should be updated as the plate was modified
Tracing on the H4 plateform will be very low accuracy because of the lack of reference point inside the NP04 cleanroom

Seen by **FUMEY Sylvain** (EN-HE)
ok

Seen by **DUQUE CARVALHO Filipa** (BE-ASR)

Seen by **BEYNEL Alexandre** (BE-GM)
Seen

✔ **Accepted** by **BOISSEAUX-BOURGEOIS Philippe** (BE-EA)
ok

Seen by **MARSH Simon Robert** (HSE-OHS)

✔ **Accepted** by **BOISSEAUX-BOURGEOIS Philippe** (BE-EA)
ok

Seen by **MARSH Simon Robert** (HSE-OHS)

✔ **Accepted** by **EBN RAHMOUN Aboubakr** (BE-EA)
Ok for me

Seen by **KADI Yacine** (BE-EA)
OK seen

Page comments

Page 2
please correct installation date: EYETS 23/24 instead of YETS 22/23

Seen by **PELLETIER Serge** (EN-HE)

Seen by **RESNATI Filippo** (EP-NU)
Comments sent to authors

Seen by **BERTONE Caterina** (EN-HE)
seen

Seeking approval from EATM

ECR for Approval

SPSX-X-EC-0001
Version **0.2**

By Giulia Romagnoli

Installation of XCET Detectors and Scintillating Fibers Monitors in Neutrino Platform

Seen by **DI GIULIO Letizia** (EP-DI)	Created on 2023-11-03, 14:35
Ok for me, thanks. Comments: IMPACT is needed for the works to be performed on the NP04 beam platform, as well as a visit on site to be organised with the NP TSO and TC to analyse possible co-activity in the clean room.	
Seen by **AHDIDA Claudia Christina** (HSE-RP)	Created on 2023-11-07, 07:13
Seen	
Seen by **TSHILUMBA David** (HSE-OHS)	Created on 2023-11-07, 10:10
ok,seen.	
Seen by **GAIGNANT Christelle** (BE-ASR)	Created on 2023-11-27, 11:47
The patrol box should be considered as an EIS-access. Please update table 5.1.Thanks	
Seen by **LINO DIOGO DOS SANTOS Miguel** (BE-EA)	Created on 2024-03-08, 11:45
-	
Accepted by **TAN Jocelyn** (SY-BI)	Created on 2024-04-23, 15:07
OK	
Seen by **SCHWARZ Philip** (TE-MSC)	Created on 2024-06-12, 11:03

Seeking approval from EATM

ECR for Approval

SPSX-C-EC-0002
Version **0.3**

By Maciej Peryt

CESAR NA-CONS Renovation - Virtual Device Server Consolidation Plan

As part of the NA-CONS project and following an ATS management directive, work is ongoing to eradicate the CESAR Control System by adapting and using the Accelerator Control System to provide a functional replacement.

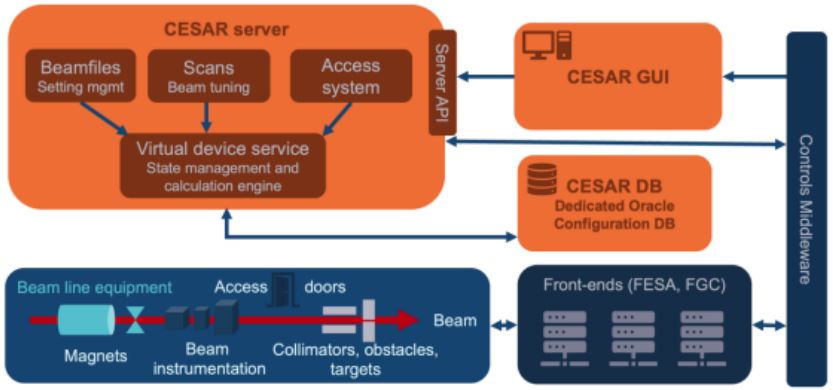

Figure 1 — CESAR architecture overview.

SUMMARY OF THE ACTIONS TO BE UNDERTAKEN:

- Update the FESA classes involved and create new ones, where applicable.
- Create the virtual classes where no FESA-based solution is feasible.
- Update the CESAR server, tracking the progress of the items above.
- Perform component and integration testing.
- Deployment in production in function of experimental areas schedule.
- Phase-out of CESAR virtual device server, in function of NA-CONS schedule.

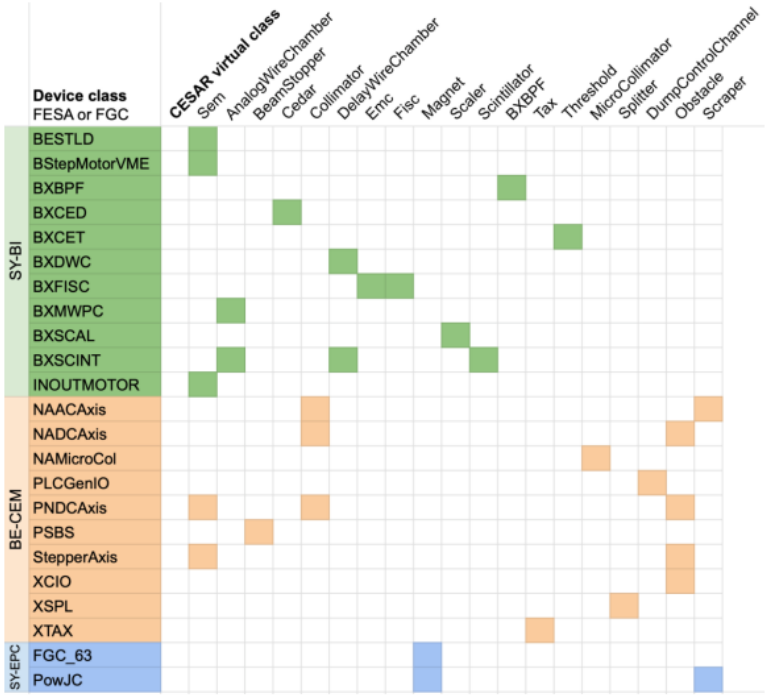

Figure 3 — CESAR virtual classes vs FESA/FGC device classes: dependency matrix.

This ECR details work needed from BE-CEM, SY-BI and BE-EA for different equipment types, as well as the resulting distribution of responsibilities.

ECR for Approval

SPSX-C-EC-0002
Version **0.3**

By Maciej Peryt

CESAR NA-CONS Renovation - virtual Device Server Consolidation Plan

Table 1 — The timeline of the virtual device server renovation.

By when	What	By whom
Beginning of YETS 24	Renovation of FESA classes	BE-CEM SY-BI
Beginning of YETS 24	Virtual classes to cover the Sems and Scrapers use-cases	BE-CSS BE-EA
End of YETS 24	Testing	BE-CEM SY-BI BE-CSS BE-EA BE-OP
Start of physics 2025	Deployment	BE-CEM SY-BI BE-CSS
Q3 2025	End of consolidation	BE-CEM SY-BI BE-CSS BE-EA BE-OP

ECR for Approval

SPSX-C-EC-0002
Version **0.3**

By Maciej Peryt

CESAR NA-CONS Renovation - virtual Device Server Consolidation Plan

Seen by **BLANC Jeremy** (EN-EL) — Created on 2024-07-11, 10:07

Seen by **GENILLON Xavier** (SY-EPC) — Created on 2024-07-11, 10:38
Seen

Accepted by **BRUGGER Markus** (BE-EA) — Created on 2024-07-11, 11:28
ok from my side (Johannes still going through the detail)

Seen by **PELLETIER Serge** (EN-HE) — Created on 2024-07-11, 14:00

Seen by **MURILLO GARCIA Raul** (SY-EPC) — Created on 2024-07-12, 11:04
ras

Accepted with Warning by **ORTEGA RUIZ Inaki** (SY-BI) — Last modified on 2024-07-16, 15:22 | Created on 2024-07-16, 15:19
Ok, but I believe the Scaler (BXSCAL FESA class) also has some metadata stored in CESAR, which should be read from FESA in the future.

Accepted by **KADI Yacine** (BE-EA) — Last modified on 2024-07-17, 16:29 | Created on 2024-07-17, 16:29

Seen by **SCHWARZ Philip** (TE-MSC) — Created on 2024-07-18, 09:16

Seen by **BEYNEL Alexandre** (BE-GM) — Created on 2024-07-19, 10:58

Accepted by **RODERICK Chris** (BE-CSS) — Created on 2024-07-22, 15:34
All clear, in BE-CSS we are committed to the defined work and timeline.

Seeking approval from EATM

ECR for Approval

SPSX-C-EC-0002
Version **0.3**

By Maciej Peryt

CESAR NA-CONS Renovation - virtual Device Server Consolidation Plan

✔ **Accepted** by **BERNHARD Johannes** (BE-EA) — Created on 2024-07-23, 21:37
OK from my side. The development and future maintenance for the BE-EA specific parts is new to the group and in particular to the LE section and will need support by the equipment groups, CSS, and OP.

✔ **Accepted** by **BURDZANOWSKI Lukasz** (BE-CSS) — Created on 2024-07-24, 10:07
Thank you for the document.

✔ **Accepted** by **LEFEVRE Thibaut** (SY-BI) — Created on 2024-07-25, 09:32
Ok from the SY-BI side,

A slight comment nonetheless that the proposed plan implies that the final software orchestration has to be done by BE-EA.

✔ **Accepted** by **DI CASTRO Mario** (BE-CEM) — Created on 2024-07-29, 14:16

– **Seen** by **HERTY Andreas** (BE-ASR) — Created on 2024-07-29, 15:27
No influence on EIS systems or other Safety relevant systems for beam operation identified.

– **Seen** by **GAILLARD Yves** (SY-EPC) — Created on 2024-08-06, 16:44

– **Seen** by **MONTABONNET Valerie** (SY-EPC) — Created on 2024-08-13, 10:46

– **Seen** by **PLUTECKI Przemyslaw** (SY-EPC) — Created on 2024-08-13, 11:48
OK

Seeking approval from EATM

Thank you!