

ECR/Documents for Information and Approval

Giulia Romagnoli and Natalya Kahn for BE-EA, 2024-12-17

[EA Documents - Agile Board - CERN Central Jira](#)



LIST OF DOCUMENTS for Info

FOR INFORMATION EATM				
Summary	Reporter	EA Projects	EDMS number	EDMS Status
Clean Room Functional Specification	Krystian Sidorowski	North Area	3189466 – SPSX-J-SPC-0004	Under Approval
GHN2 Fire Protection Safety Tests	Filipa Duque Carvalho	North Area	3203830 – SPSX-S-RPT-0006	Under Approval
FISC Motor Consolidation	Inaki Ortega Ruiz	North Area, NACONS	3173084	Under Approval
Multi-Wire Proportional Chambers - Critical Spares	Inaki Ortega Ruiz	North Area, NACONS	3173094	Under Approval
MarXdiscap Power Converter for AD injection SMI5306 septum	Todor Todorcevic	AD	2679021 – AD-R-ES-0006	Engineering check
Assembly Procedure for the Fast FISC	Eva Kamenicka	Experimental Areas	3178861	Under Approval
Finite Element Analysis for the MCB vacuum chamber in F61	Angelo Petrellese	Experimental Areas	3162570	Under Approval
Integration Study of the Cooling Cells Demonstrator in TT7	Lukasz Krzempek	Experimental Areas	3200071	Engineering check

LIST OF DOC for FUTURE APPROVAL

ECR INFO/FUTURE APPROVAL EATM				
Summary	Reporter	EA Projects	EDMS number	EDMS Status
Low-energy Beams in the T10 Beamline of the East Area	Maarten Van Dijk	East Area	3174332 – PSZ-L-EC-0003	In Work
Creation of New Lorry and Personnel Doors in Building 911	Jean-Louis Grenard	North Area, HI-ECN3	3173295 – SPSX-J-EC-0008	Engineering check
GIF++ extension	Sylvain Girod	North Area		In Work
GIF++ gas balcony	Sylvain Girod	North Area		In Work
Installation of a New Hydrogen Buffer outside EHN1 for the NA61/SHINE Experiment	Bartosz Maksiak	North Area	3197663 – SPSX-J-EC-0009	In Work
Additional Platform above ALPHA Local Control Room in AD Hall	Francois Butin	AD	2897943 – AD-LJ-EC-0023	Engineering check

LIST OF DOCs for APPROVAL

ECR APPROVAL EATM				
Summary	Reporter	EA Projects	EDMS number	EDMS Status
AUG installation EHN2+ AUL removal EHN1, GIF++/H8 and EHN2/M2/BA82	Marcin Szewczyk	North Area	3178530 - SPSX-SF-EC-0016	Under Approval
PPE144 patch panel installation with passarelle modification	Sylvain Girod	North Area – NACONS	3121860 – SPSX-J-EC-0006	Under Approval
Asset Replacement Request - Magnet replacement	Philip Schwarz	North Area	3168416 – SPSX-M-ARR-0002	Under Approval

ECR for Approval

SPSX-SF-EC-0016

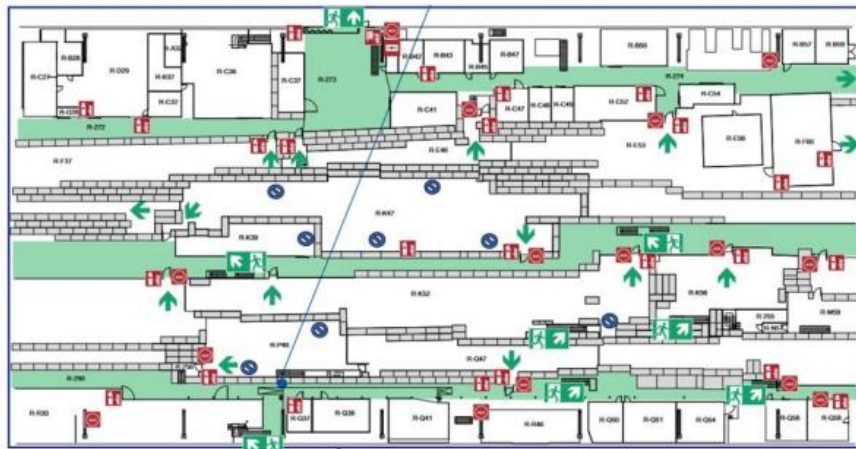
Version **0.2**

By Marcin Szewczyk

AUG installation EHN2+ AUL removal EHN1, GIF++/H8 and EHN2/M2/BA82

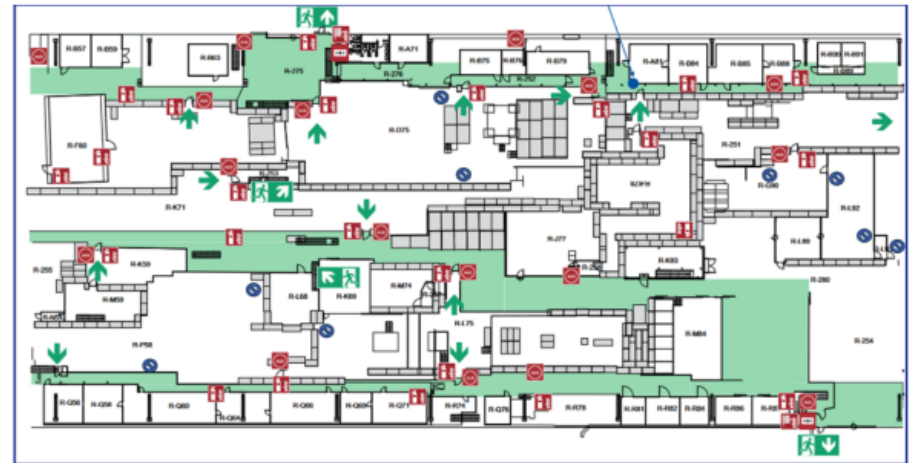
“Arrêts d’urgence locaux” (AUL) will be removed from EHN1 and EHN2 and its security function will be replaced by existing “arrêts d’urgence généraux” (AUG). In EHN2, new AUG buttons will be added.

In line with the strategy agreed with HSE, EP, EN-EL and BE-EA, AULs are being removed and replaced by AUGs. In EHN1 and EHN2 in particular, this is due to faulty MN coils and non-compliance with IS-5 requirements. Obsolete NANO PLC systems will also be removed.



PPE134 (R-K47+R-K39): 5x AUL à supprimer
PPE138 (R-P40): 2x AUL à supprimer
PPE146 (R-K52): 1x AUL à supprimer

Figure 1: AUL removal in PPE134, PPE138 and PPE146 in EHN1 [2].



PPE172 (R-D75): 2x AUL à supprimer
PPE164 (R-G90, R-L92/95): 4x AUL à supprimer
PPE158 (R-P58): 2x AUL à supprimer
PPE158 (R-L75): 1x AUL à supprimer

Figure 2: AUL removal in PPE172, PPE164, PPE158 (R-P58) and PPE158 (R-L75) in EHN1 [2].

ECR for Approval

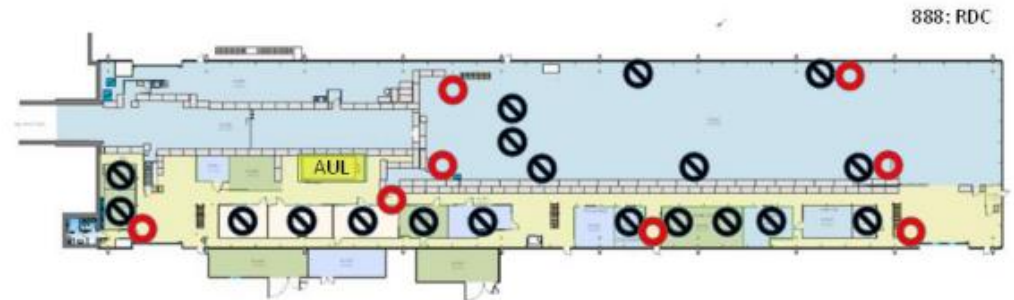
SPSX-SF-EC-0016

Version **0.2**

By Marcin Szewczyk

AUG installation EHN2+ AUL removal EHN1, GIF++/H8 and EHN2/M2/BA82

In EHN2, one AUL zone will be retained (marked in Figure 3).

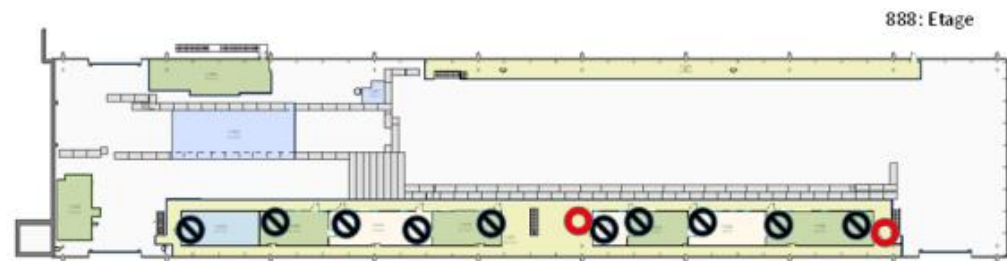


Synthèse: Démontage 29 AULs (+ MN's associés), rajoute de 10 AUG sur chaîne existant
AUL retenu dans 1 zones indiqués: Cage convertisseurs.

⊘ AUL à supprimer
● AUG à rajouter

Figure 3: AUL removal and AUG installation in EHN2 (ground floor) [3].

The short power cuts needed to remove MN coils may affect AMBER equipment operation in EHN2.



⊘ AUL à supprimer
● AUG à rajouter

Figure 4: AUL removal and AUG installation in EHN2 (first floor) [3].

ECR for Approval

SPSX-SF-EC-0016
Version **0.2**

AUG installation EHN2+ AUL removal EHN1, GIF++/H8 and
EHN2/M2/BA82

By Marcin Szewczyk

— Seen by LA MENDOLA Saverio (HSE-OHS)

⚠ Accepted with Warning by VAXELAIRE Didier (EN-AA)

Quels sont les details à fournir concernant le sEIS Acces?

— Seen by CHARVET Thierry (EN-EL)

Je ne comprend pas mon rôle dans cette opération, dont je ne connais pas la teneur.

⚠ Accepted with Warning by KADI Yacine (BE-EA)

One AUL will remain in operation in EHN2 zone R-0009, however the NANO PLC system will be removed entirely. How will this impact the functioning of the remaining AUL ?

— Seen by GENILLON Xavier (SY-EPC)

Seen

— Seen by BEYNEL Alexandre (BE-GM)

— Seen by EBN RAHMOUN Aboubakr (BE-EA)

Seen

— Seen by AHDIDA Claudia Christina (HSE-RP)

Seen

⚠ Accepted with Warning by BERTOLASI Stefano (EN-EL)

- Minor comments provided by email on 10.12.2024
- Document to be approved also by TSO of EHN1/EHN2

✓ Accepted by SZEWCZYK Marcin (EN-EL)

Concerning the EIS system no details are required.
With reference to Yacine's comment the remaining AUL will be directly wired to corresponding breaker or we will provide AUL interface in case it has to actuate more than one breaker.

— Seen by FERNANDEZ Julien Mickael (EN-PAS)

✓ Accepted by GIROD Sylvain (BE-EA)

ok

Seeking approval from EATM



ECR for Approval

SPSX-J-EC-0006

Version 0.2

By Sylvain Girod

PPE144 patch panel installation with passarelle modification

This document describes the modification of the shielding bridge inside the PPE144 experimental area in order for NA64 experiment to install big detectors.

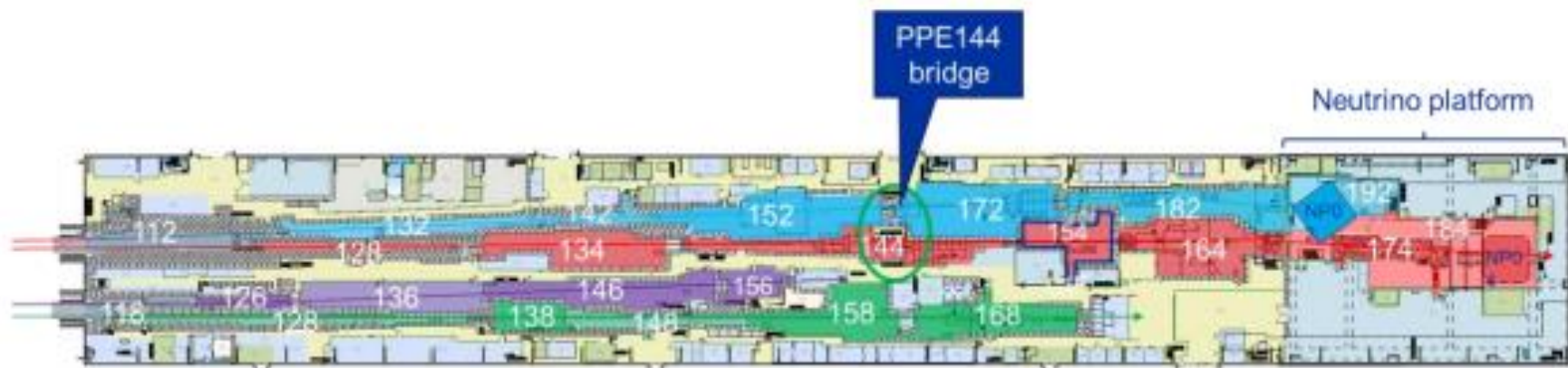


Figure 1: Location of PPE144 zone inside EHN1. The bridge in question is shown inside the green circle.

The bridge in question is the one leading to PPE144 transversing also PPE152 and PPE172 on the Jura side of the building.

This change will allow a large straw tracker station to be moved closer to the third magnet of the NA64 experiment and significantly increase their acceptance for dimuons.

Additional space will be also free for the installation of the new moveable platform that will reduce the time needed for the HCAL calibration. The safety of personnel against ionizing radiation will be improved.

ECR for Approval

SPSX-J-EC-0006
Version 0.2

By Sylvain Girod

PPE144 patch panel installation with passarelle modification

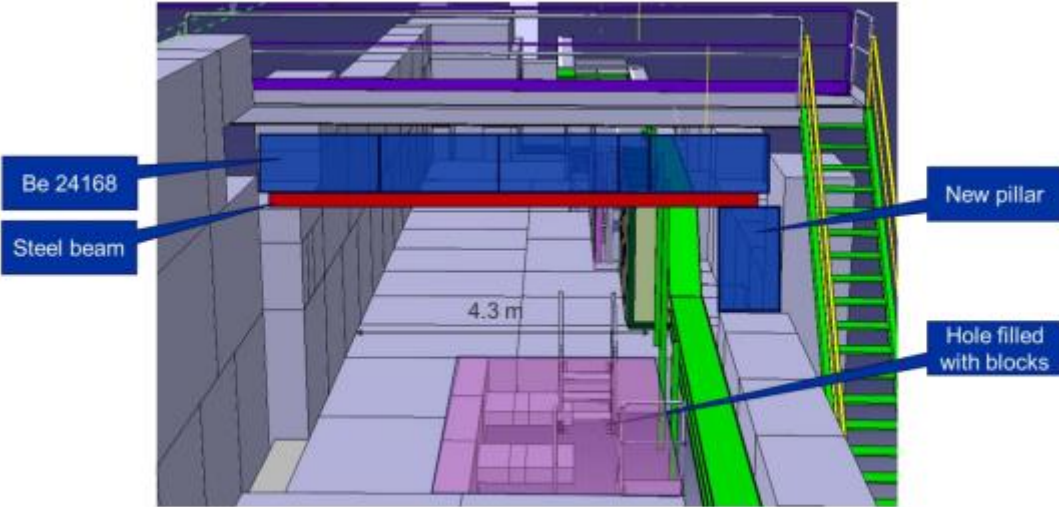


Figure 4: Modifications needed in the shielding bridge area.

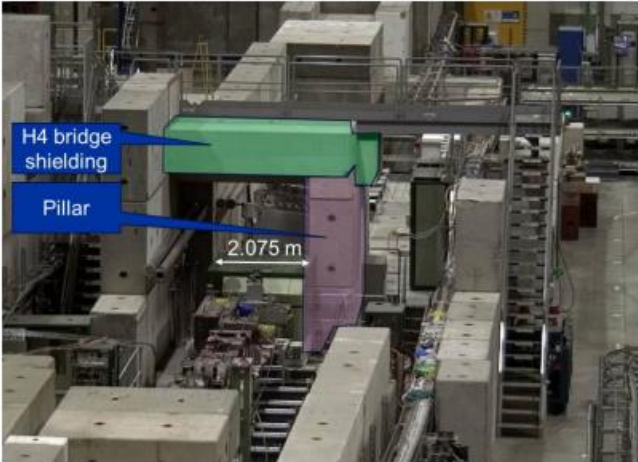


Figure 2: The shielding bridge discussed in the present document. The shielding is shown in green, and the supporting pillars also are marked in purple.

ECR for Approval

SPSX-J-EC-0006

PPE144 patch panel installation with passarelle modification

Version **0.2**

By Sylvain Girod

✔ **Accepted** by **HERTY Andreas** (BE-ASR) Created on 2024-09-03, 13:49
Comments to version 0.1 integrated. Thank you.

➡ **Seen** by **SCHWARZ Philip** (TE-MSK) Created on 2024-09-03, 14:49

⚠ **Accepted with Warning** by **MORTON Richard Francis** (HSE-OHS) Created on 2024-09-03, 14:57
The structural aspect of the concrete blocks must be assessed, HSE can assist with the seismic checks and advise on effects of the new arrangement on the existing structures.

✔ **Accepted** by **ABERLE Frederic Lionel** (HSE-RP) Created on 2024-09-03, 15:13
Nothing to add compared to v.01. Thanks!

➡ **Seen** by **VAXELAIRE Didier** (EN-AA) Created on 2024-09-03, 16:34

➡ **Seen** by **VENDEUVRE Camille** (BE-GM) Created on 2024-09-03, 17:22

➡ **Seen** by **KADI Yacine** (BE-EA) Created on 2024-09-03, 18:00
the proposed wall to be installed upstream of the bridge should be validated against seismic risks. Not sure the results would come before YETS 24/25 which is foreseen for these modifications.
In several occasions, one is referring to shielding improvements but there is no reference to any shielding calculations having been performed ?

➡ **Seen** by **BEYNEL Alexandre** (BE-GM) Created on 2024-09-04, 12:13

➡ **Seen** by **GENILLON Xavier** (SY-EPC) Created on 2024-09-04, 14:05
Seen

Seeking approval from EATM



ECR for Approval

SPSX-J-EC-0006

Version **0.2**

By Sylvain Girod

PPE144 patch panel installation with passarelle modification

- ✔ **Accepted** by CHARITONIDIS Nikolaos (BE-EA) Last modified on 2024-09-09, 16:16 | Created on 2024-09-09
No impact on the beam delivery, it will however help a lot the installation / deinstallation and improve the physics results for NA64e!
- **Seen** by ANDREINI Marco (HSE-OHS) Created on 2024-09-10
At disposal to assess the seismic stability of the new bridge configuration
- ✔ **Accepted** by POLYAKOV Vladimir (EP-UFT) Created on 2024-09-10
This modification is improved our acceptance for the measurement of muons and is very important for NA64e.
- ✔ **Accepted** by PIRA Yann Pierre (HSE-RP) Created on 2024-09-10
OK
- ⚠ **Accepted with Warning** by BERTONE Caterina (EN-HE) Created on 2024-10-03
First of all, please don't forget to consult me for each ECR circulating in this area or wherever else at CERN!
Have the structural resistance of the red beams been verified ? in particular for the addition of extra vertical shielding.
Please ask to M. Andreini a seismic verification as he proposes.
Has the crane passage after addition of extra shielding been verified?
- **Seen** by GRENARD Jean-Louis (SY-STI) Created on 2024-11-06
- ✔ **Accepted** by CHARITONIDIS Nikolaos (BE-EA) Created on 2024-11-16
Maybe would be good to attach also this document ?
<https://edms.cern.ch/document/3118945/1>
- ✔ **Accepted** by ROMAGNOLI Giulia (BE-EA) Last modified on 2024-12-17, 11:15 | Created on 2024-12-17
Seismic calculations done by HSE-OHS and SCE/SAM. Report available in [EDMS 3212641](#).
To reply to Caterina, in a first moment the additional shielding will not be installed, so the crane passage is guaranteed.

Seeking approval from EATM



ARR for Approval

SPSX-M-ARR-0002
Version **0.1**

By Philip Schwarz

Asset Replacement Request - Magnet replacement

Due to a coil leak, LSX.X0220134 must be replaced.



ARR for Approval

SPSX-M-ARR-0002

Asset Replacement Request - Magnet replacement

Version **0.1**

By Philip Schwarz

— Seen by GENILLON Xavier (SY-EPC)

Created on 2024-11-20

Seen

— Seen by BEYNEL Alexandre (BE-GM)

Created on 2024-11-20

⚠ Accepted with Warning by KADI Yacine (BE-EA)

Created on 2024-11-20

I believe one should be a bit more detailed in explaining the reason and the features of the location (TCC2) with a picture or two.

Seeking approval from EATM



Thank you!

