**CERN**CH-1211 Geneva 23
Switzerland



XX-XX-XX-XXX

Date: 2020-XX-XX

## SAFETY REPORT

# Risk Assessment for the Individual System Tests of [Equipment] in East Area

#### ABSTRACT:

This document aims at identifying the hazards induced by the Individual System Tests (ISTs) that need to be performed in East Area before the hardware commissioning period, the hazards present in the environment of the ISTs and defining the compensatory measures to put in place to ensure safety during these ISTs.

DOCUMENT PREPARED BY:	DOCUMENT CHECKED BY:	DOCUMENT APPROVED BY:
<u>Equipment Responsible</u> <u>WPL</u>	Louis-Frederic Andre (BE-ASR) Solve Thorkildsen Slettebak (BE-OP)	<u>Group Leader</u> (of the system concerned)
<u>WSS</u>	Filipa Carvalho (EN-EA)	Sébastien Evrard (EN-EA)
	Coordination Team	

DOCUMENT SENT FOR INFORMATION TO:

This document is uncontrolled when printed. Check the EDMS to verify that this is the correct version before use.



EDMS NO. **000000** VALIDITY REV. **DRAFT** 0.0

Page 2 of 8

HISTORY OF	CHANGES
------------	---------

		HISTO	ORY OF CHANGES
REV. NO.	DATE	PAGES	DESCRIPTIONS OF THE CHANGES
0.1	202X-XX-XX	n	



EDMS NO. | REV. | VALIDITY | O000000 | O.0 | DRAFT

Page 3 of 8

# TABLE OF CONTENTS

1.	INTRODUCTION	4
2.	SCOPE	4
3.	EQUIPMENT INVOLVED AND AFFECTED AREAS	4
3.1	Identification & Location of the Tested Equipment	4
3.2	Safety Conformity of the Equipment	4
4.	SERVICES REQUIRED FOR THE TEST	5
4.1	Access Systems	5
4.2	Accelerating Structures	5
4.3	Beam Intercepting Devices	5
4.4	Control Systems	5
4.5	Cooling & Ventilation	5
4.6	Cryogenic Systems	5
4.7	Electrical Systems	5
4.8	IT Services	5
4.9	Machine Interlocks	5
4.1	0 Power Converters	5
4.1	1 RF Systems	5
4.1	2 Vacuum Systems	5
5.	CO-ACTIVITIES	5
6.	SAFETY CONSIDERATIONS	5
6.1	Access Conditions	6
6.2	Cryogenics	6
6.3	Electrical Systems	6
6.4	Ionizing Raditions	6
6.5	Non-ionizing Radiations	6
6.6	Pressurized Fluids/Equipment	6
7.	TEST PROCEDURE	7
8.	VALIDATION OF THE TEST	8
9.	ANNEXES	8



EDMS NO.	REV.	VALIDITY
0000000	0.0	DRAFT

Page 4 of 8

#### 1. INTRODUCTION

The aim of this document is to identify the hazards induced by the Individual System Tests (ISTs) that need to be performed in East Area before the hardware commissioning period, to identify the hazards present in the environment of the ISTs and to define the compensatory measures to implement to ensure safety during these ISTs.

#### 2. SCOPE

- Motivation
- If it makes senses, divide the work in phases, identify their respective working periods and list the tasks for each phase

## 3. EQUIPMENT INVOLVED AND AFFECTED AREAS

#### 3.1 Identification & Location of the Tested Equipment

Equipment ID	Equipment Location
XXXXXXXX[YYY]	XXX.YYYYYZZZ

Check EDMS 2355703 for more information on the guidelines for the identifiers.

Use this section to describe the equipment connections.

## 3.2 Safety Conformity of the Equipment

only leave the sections that are relevant

#### 3.2.1 Electrical

Has the equipment has been inspected by HSE and accepted (i.e. the equipment is compliant)?  ${\it YES/NO}$ 

Inspection report ID / Planned date

#### 3.2.2 Mechanical

Has the equipment has been inspected by HSE and accepted (i.e. the equipment is compliant)? **YES/NO** 

Inspection report ID / Planned date

#### 3.2.3 Pressure

Has the equipment has been inspected by HSE and accepted (i.e. the equipment is compliant)? **YES/NO** 



O00000	0-0	DRAFT
000000	0.0	DRAFI

Page 5 of 8

Inspection report ID / Planned date

#### 3.2.4 Radiation

Has the equipment has been inspected by HSE and accepted (i.e. the equipment is compliant)? **YES/NO** 

Inspection report ID / Planned date

## 4. SERVICES REQUIRED FOR THE TEST

- only leave the sections that are relevant
- in each section briefly explain the need for that service in the context of the IST
- 4.1 Access Systems
- 4.2 Accelerating Structures
- 4.3 Beam Intercepting Devices
- 4.4 Control Systems
- 4.5 Cooling & Ventilation
- 4.6 Cryogenic Systems
- 4.7 Electrical Systems
- 4.8 IT Services
- 4.9 Machine Interlocks
- 4.10 Power Converters
- 4.11RF Systems
- 4.12 Vacuum Systems

#### 5. CO-ACTIVITIES

- Define co-activities in the context of the equipment in question
- Identify all the possibilities of co-activity

<No co-activities are foreseen in the area interested by the tests.>

#### 6. SAFETY CONSIDERATIONS

only leave the sections that are relevant



EDMS NO.	REV.	VALIDITY
0000000	0.0	DRAFT

Page 6 of 8

- General considerations about hazards
- 6.1 Access Conditions
- 6.2 Cryogenics
- 6.3 Electrical Systems
- 6.4 Ionizing Raditions
- 6.5 Non-ionizing Radiations
- 6.6 Pressurized Fluids/Equipment

EDMS NO. REV 0000000 0.0

VALIDITY **DRAFT** Page 7 of 8

# 7. TEST PROCEDURE

	Sequence of the ISTs	Co- activity?	Dates	Conditions needed for the tests (safety related)	Hazards induced by the ISTs	Hazards present in the environment	Mitigation measures
1	Phase 1 (see chapter 2)	No	XX/XX/202X to XX/XX/202X				
2	Phase 2 (see chapter 2)						



0000000	0.0	DRAFT
EDMS NO.	REV.	VALIDITY

Page 8 of 8

## 8. VALIDATION OF THE TEST

Indications on how to use the data collected during the test, possible criticality of some points.

Specify at the end of the test the safety conditions of the equipment. The equipment should not the generate any risks.

## 9. ANNEXES