Final Project Report

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Abstract

This document provides a brief summary of the outcomes achieved during the execution phase of the Sub-Work Package 16.05, whose objective was to further investigate and research on Human Performance in Automation Support.

Project Number 16.05.-

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1 Final Project Report

1.1 Introduction

The Sub-Work Package 16.05 - Human Performance (HP) in Automation Support - is included in the structure of Work Package (WP)16 and contributed to the Transversal Areas (TA) developments.

The Transversal developments consists of 5 Sub-WPs covering the Transversal Areas of Safety, ATM Security, Environmental Sustainability, Human Performance Management System R&D and HP in Automation Support, for 22 projects in total.

The majority of the projects of these five Sub-WPs addressed more 'development' activities than real research ones. Their results and deliverables were tested and integrated into the 16.06.xx projects in order to improve the TA assessment baseline and the reference material to be used for the TA assessments at operational and system project level (WP04-15) and to build the Transversal Cases (e.g. Safety Case) and the overall Business Cases. Consequently, the challenge was to make deliverables available to the 16.06 Transversal Coordination and Support project and to primary projects, too, as soon as possible.

For this reason, and to improve and/or complement Transversal Assessments and Case methodologies it was important to manage all R&D projects in SWP 16.01 to 16.05 in a harmonised and consistent way.

The institution of the WP16 Management Team (WPMT), composed of the WP Leader, the WP Deputy Leader, the Sub-WP Managers and supported by the WP16 Assistant, ensured all the day-to-day WP management activities and the Team was responsible for the achievements of the work package objectives. In line with the SESAR PMP, the Sub-WP managers' responsibility was more focused on project progress monitoring.

The activities of Sub-WP16.01-16.5 had to be synchronised with, and fed into, the Integrated Coordination Function of Sub-WP16.06. This was meant to ensure a seamless integration into the overall TA methodologies and their use and application throughout the SESAR Development Phase.

1.2 Sub-WP 16.05 - Structure and Achievements

The Sub-WP16.05 objective was a further investigation and research on Human Performance in Automation Support to be able to respond to SESAR challenges and to the evolving needs of the Human Performance Management System. It entered in the execution phase on 18.06.2010.

At the beginning this Sub-WP consisted of four projects covering the development of HP in Automation support related methodologies and tools.
16.05.01- Identification and integration of automation Related Good Practices
16.05.02 - Trade-off between Planning and Flexibility
16.05.03 - Guidance on effective information presentation
16.05.04 - Identification of Selection and Training requirement to work with automated decision and support tools. This project was merged with 16.04.03 (turnover date 31.3.2012).

A brief outline of the above mentioned projects and their deliverables production is reported hereafter.

16.05.01: Identification and Integration of Automation Related Good Practices (December 2010 – April 2013)
Project Contributors : AIRBUS, AENA, DFS, ENAV(PM), THALES, EUROCONTROL, NATMIG.

Project 16.05.01 Tasks & Deliverables		
Task Deliverable ID	**Deliverable Title**	**Submission date**
Task T002 **16.05.01 D02**	Identification of Issues in Human Performance Automation Support	13.05.2011
Task T003 **16.05.01-D03**	Framework for HP Automation Related Good Practices	25.10.2011
Task 004	Guidance Material for HP Automation Support	15.02.2013

16.05.01-D04	(Guidelines for Addressing HP Automation Issues)	
Task T001 **16.05.01 D06**	Final Project Report (Project Closeout Report)	22.04.2013

16.05.02: **Trade-off between Planning and Flexibility (August 2011- August 2014)**
Project Contributors: AENA, AIRBUS, ENAV, EUROCONTROL, INDRA, NATMIG (PM)

Project 16.05.02 tasks & Deliverables		
Task Deliverable ID	**Deliverable Title**	**Submission date**
Task T002	*Final set of activity models* - produced 6 activity models.	No planned Deliverable
Task T003	*Final set of scenarios plus interaction analysis*- produced 5 scenarios.	No planned Deliverable
Task T004 **16.05.02 D04**	Final Version of Guidelines/Checklist	12.12.2013
Task T001 **16.05.02 D01**	Final Project Report (Project Closeout Report)	01.08.2014 (draft)

16.05.03: **Guidance on effective information presentation (December 2010 – August 2013)**
Project Contributors: AENA, AIRBUS, DFS, ENAV, FREQUENTIS (PM)

16.05.03 Deliverables		
Task Delivered ID	**Deliverable Title**	**Submission date**
Task T002 **16.05.03 D02**	Information needs - Baseline Report	21.02.2011
Task 003 **16.05.03 D03**	Information needs - Analysis Findings	25.10.2011
Task 004 **16.05.03 D04**	Information Needs: Categorization of information	26.04.20112
Task 005 **16.05.03 D05**	Generic SESAR Information Presentation Guide	05.11.2012
Task T006 **16.05.03 D06**	Updated Generic SESAR Information Presentation Guide	19.04.2013
Task T001 **16.05.03 D07**	Final Project Report (Project Closeout Report)	19.08.2013

16.05.04 Identification of Selection and Training requirements to work with automated decision and support tools (July 2011 - March 2012).
Project Contributors: AIRBUS, DLR/DFS (PM), EUROCONTROL, NORACON, THALES
This project was merged with 16.04.03 in order to avoid the risk of work overlapping and resources dispersion. The content and the resources were transferred into 16.04.03 (turnover date 31.3.2012).

1.3 Sub-WP 16.05 - Project Tasks

The following tasks were performed by Sub-WP 16.05:

Task 001 - **PIR Support and Review**

Support was given to:

- 16.05.xx Project Managers for the production and review of the Project Initiation Reports.
- 16.05.xx Project Managers for the production of the PMPs related to their execution phases.

    – WP leader for the production of Change Impact Assessments (CIA). The first version of the CIA was elaborated for 16.05.01, 16.05.02, 16.05.03 and 16.05.04.

Task 002 - Progress Monitoring & Co-ordination –

Sub-WP16.5 quarterly Progress Reports were timely published onto SJU extranet since they were directly requested to the Sub-WP Manager. After, regular information and data on the progress of the 16.05.xx projects were provided (on quarterly basis) to the WP16 Leader as input for generating the WP16 Global Progress Reports.

Co-ordination and consultation among the Sub-WP 16.05 and 16.05.xx projects were held along all the project phases (initiation, execution and closure) through all the appropriate communication means (emails, conference-calls, WebEX, face-to-face meetings, workshops).

Coordination with WP16, other Sub-WP16.x and SJU was ensured participating in the WPMT meetings both face-to-face or via WebEx.

Coordination meetings were held among 16.06.05 and Sub-WP16.05.xx/16.04.xx projects, especially for setting up and executing the test application for each project.
Exchange meetings among 16.06.05, Sub-WP16.05.xx and 16.04.xx were arranged for findings exchange, content alignment and synchronization.
Coordination and sponsorship for AUs and Staff Associations involvement in the 16.05.xx projects. In addition,16.05.01, 16.05.02 and 16.05.03 made use of the AUs Contribution.

Support was given in order to initiate, facilitate and accelerate the process for merging 16.05.04 with 16.04.03.
Monitoring and follow up of corrective actions when assigned to 16.05.xx , for instance as result of a gate review or as indications coming from the SJU or WP16 Leader, were ensured.

Task 003 - Change Management –

The required changes on Sub-Work Package and Project level in the course of the Sub-WP16.5 life cycle were managed.

The task included the preparation and submission of change requests (with regard to technical scope -content, tasks & deliverables-, effort and timing) at the Sub-WP16.05 level and the assessment or the provision of recommendations to SJU for Change Requests originated by 16.05.xx projects. Particular attention and effort was dedicated to the merger of 16.05.04 with 16.04.03. The merging process took a lot of time to be completed.

Task 004 - Management of Risks, Issues and Opportunities (RIO)–

Identification, tracking and mitigation of Sub-WP16.05 risks issues and opportunities were handled with the ongoing update of the RIO register.

Monitoring of the development and maintenance of the RIO register was made for 16.05.xx projects. This was performed in close coordination with the WP16 Leader and the SJU Programme Manager too.

Task 005 - Sub-WP Management –
Consistency of Sub-WP16.05 within the WP16 and the overall SESAR work programme was ensured. The overall planning and management of activities, resources and content during the Sub-WP16.05 Execution Phases was accomplished.

2 References

Reference to main documentation, delete if not required

[1] SESAR Programme Management Plan, Edition 03.00.01

[2] European ATM Master Plan, Edition 2

[3] Multilateral Framework Agreement ("MFA") signed between the SJU, EUROCONTROL and its 15 selected members on August 11, 2009, amended on 14 June 2010, 19 October 2010 and 2 July 2012

[4] Latest Project baseline file: "REP_16.05_LATEST_PROJECT_BASELINE.pdf" Edition date: 01/07/2014

[5] 16.05.01, Final Project Report, D6, Edition 00.01.00, 22 April 2013

[6] 16.05.03, Final Project Report, D7, Edition 00.01.00, 19 August 2013

[7] 16.05.02, Final Project Report, D1, Edition 00.00.01, 01 August 2014

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