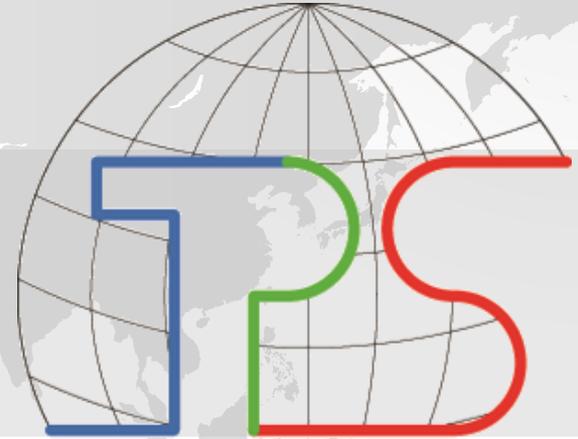




TECHNICAL PUBLICATION SYSTEM SUITE (TPS)



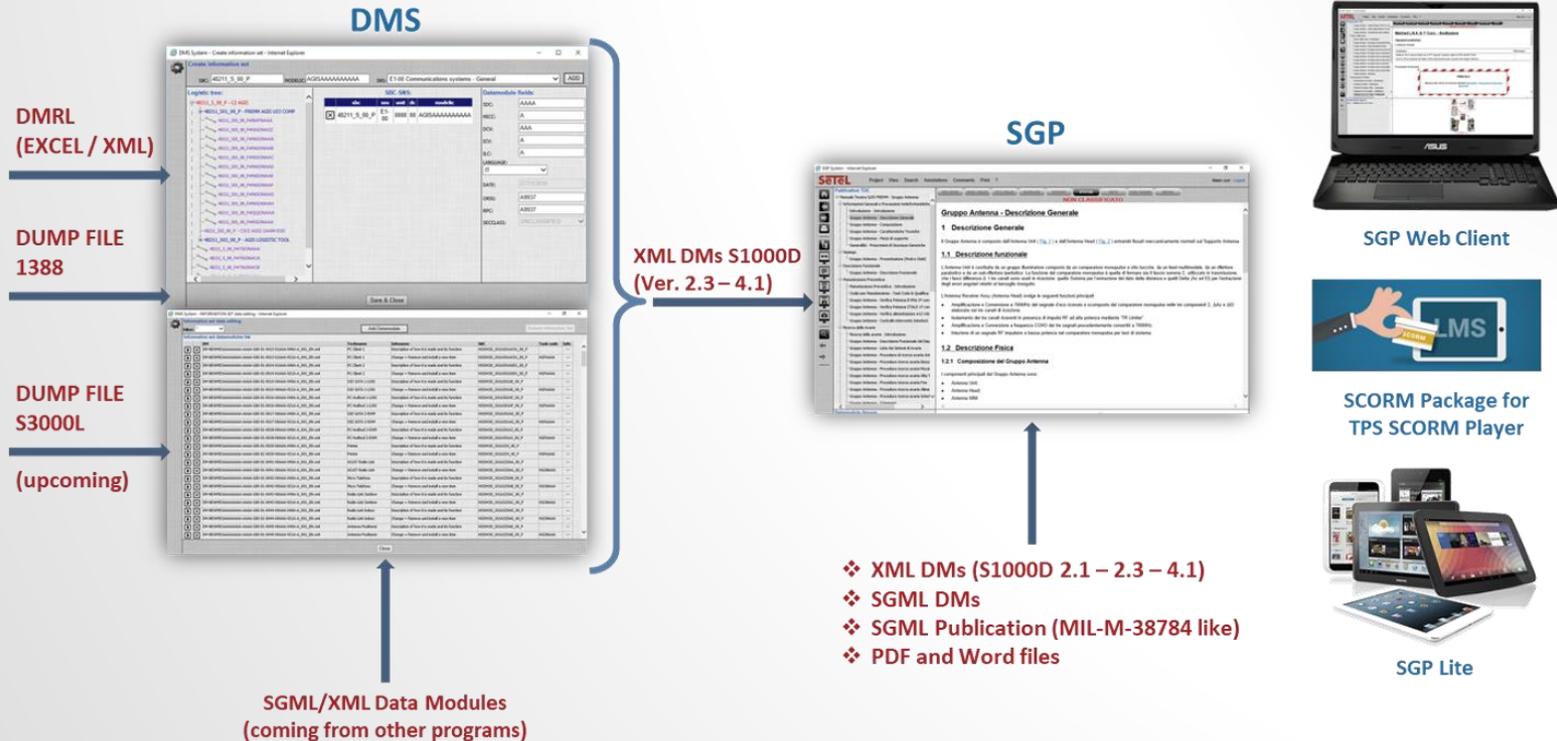
SeTeL

TECHNICAL PUBLICATION SYSTEM SUITE (TPS)

TPS, why?

- ✓ Result of **20 years** of experience in the field of IETM and of over **40 years** in the field of Logistic Support Engineering
- ✓ Synthesis at **IT level** of the internal production process developed over time by the **SeTeL Group**
- ✓ Fully developed by the **SeTeL Group**
- ✓ **Customized** on demand

TECHNICAL PUBLICATION SYSTEM SUITE (TPS)



TPS SUITE

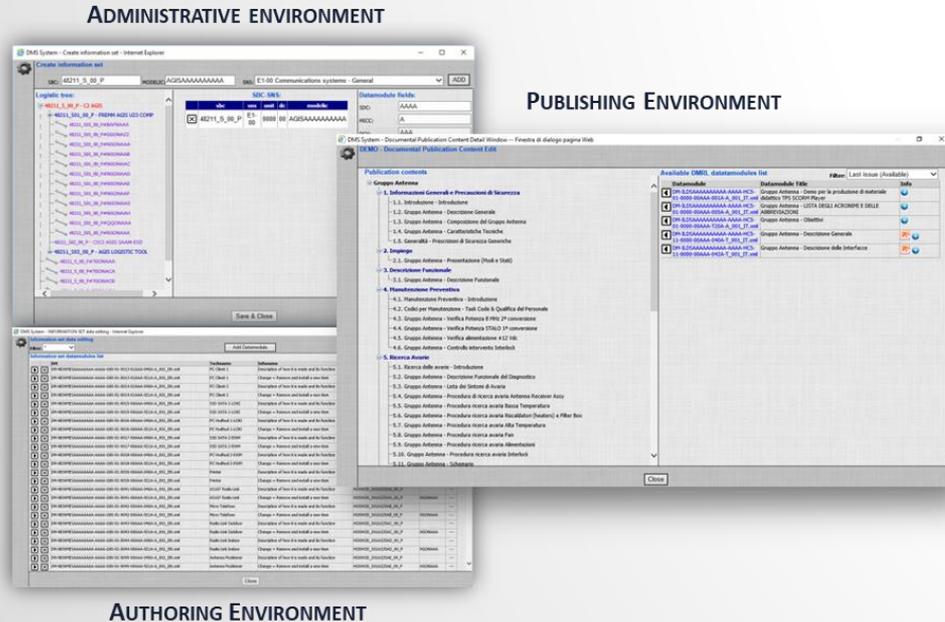
- The **Technical Publication System Suite** is made up of the following modules aimed at producing, managing and consulting the Interactive Electronic Technical Manuals based on S1000D:
- A **Document Management System (DMS module)**: a XML Web Based Authoring Tool for support in the management and production of the Information Set based on S1000D Data Modules.
- An **Interactive Publications Management System (SGP module)**: a XML Web Based Publishing Tool for visualization and management, also in configuration, of the Interactive Electronic Technical Manuals.
- An **Off-line System Tool (SGP-Lite module)**: providing off-line fruition of produced IETM on Mobile Devices (Tablets, Smartphone) or Stand-alone PC.
- A **TPS Player**: providing off-line fruition of produced Training Modules (SCORM compliant) generated by TPS.
- An «Open Source» SCORM **LMS** to be customized on request can be supplied.

TPS SUITE

NOTE: *These modules can be used stand-alone or integrated in a single tool (TPS Suite).*

- The TPS architecture is based on Windows Operating System (XP Pro, Windows 7 or Windows 8), Mysql Server Data Base and IIS Web Server. The Apps. for the IETM fruition on Tablets are developed for iOS, Android and Windows 8 environments.
- The TPS Suite, completely developed inside of **SeTeL Group**, is opened to be personalized according to specific requirements.

DOCUMENT MANAGEMENT SYSTEM (DMS)



- The **Document Management System** is a tool providing functions for creating, managing and publishing of **Interactive Electronic Technical Manuals (IETM)**.
- The software platform is aimed at efficiently managing the evolution of electronics technical manuals of any User.
- Three operating environments are provided:
 - ✓ The **Administrative Environment** is dedicated to the management of roles and accesses where the **Information Set (Data Modules Requirement List - DMRL)** will be generated
 - ✓ The **Authoring Environment** is intended for management and production of the Data Modules contents
 - ✓ The **Publishing Environment** is dedicated to the generation of IETM and/or Training Documentation

DMS ADMINISTRATIVE ENVIRONMENT

- This sub-process defines and configures the environment of the **DMS** operation. It includes the functions concerning the system setting and the identification of the actors.
- In details, the involved actions are:
 - ✓ Definition of the authorized users
 - ✓ Management of user privileges
 - ✓ Definition of the managed Authoring Projects
 - ✓ Assignment of a Manager to each Authoring Project
 - ✓ Management of access to the **DMS** functions
 - ✓ Program's Business Rules allocation to each Project
 - ✓ Back-up and restoration of Data Base and Configuration data

DMS ADMINISTRATIVE ENVIRONMENT

DEFINITION OF INFORMATION SET

- This sub-process controls and manages the generation of the Information Set or DMRL.
- In details, the involved actions are:
 - ✓ Loading and management into the system of an external DMRL produced in Excel or XML format
 - ✓ Interface with the Logistic Data Base (dump file 1388-2B format) (*upcoming implementation* the interface with the Logistic Data Base S3000L format) and generation of the Information Set based on the logistic tree
 - ✓ Assignment of MODELIC and SNS to the Information Set
 - ✓ Generation and assignment to the Author Project Manager of the DMRLs (part of Information Set)
 - ✓ Interface with the Logistic Data Base (dump file 1388-2B format), to ensure the alignment with the Logistic/Product configuration tree and data
 - ✓ Uploading and management in the system of a pre-existent set of XML DMs (S1000D Versions 2.1 - 4.1)

DMS AUTHORIZING ENVIRONMENT (1/3)

- This sub-process controls and manages the operative and collaborative work flow.
- In detail, the actions involved are:
 - ✓ Assignment of tasks and responsibilities to users involved in the authoring and control process: **Authors, Reviewer & QA responsible**
 - ✓ Assignment of tasks and responsibilities to the users involved in the publishing process: **Publisher** (as regards the IETP) & **Trainer** (as regards the Power Point Training Documentation or the SCORM compliant Training Modules)
 - ✓ Definition of documents required/included in the project
 - ✓ Loading into the system of the available source documentation
 - ✓ Generation of the Data Modules «Template» (S1000D ver. 2.3 – 4.1) where all the “Idstatus” information are preloaded, and in particular for the procedural Data Modules also the logistic data are preloaded too (“preliminary requirements” section);
 - ✓ Automatic generation of the IPD Data Modules (S1000D ver. 2.3 – 4.1);

DMS AUTHORIZING ENVIRONMENT (2/3)

- Process control including:
 - ✓ Monitoring of the workflow approval process for processed Data Modules
 - ✓ Formal check during the Data Modules upload phase, to guarantee alignment with the Schemas and the requirements of the Business Rules
 - ✓ Coherency check during the Data Modules upload phase, to guarantee alignment with the Logistic/Product configuration tree and data
 - ✓ Creation and dissemination of reports to monitor the content of the modules and to verify consistency with the equipment configuration
 - ✓ Management of the configuration of the documentation files (Data Module) produced

DMS AUTHORIZING ENVIRONMENT (3/3)

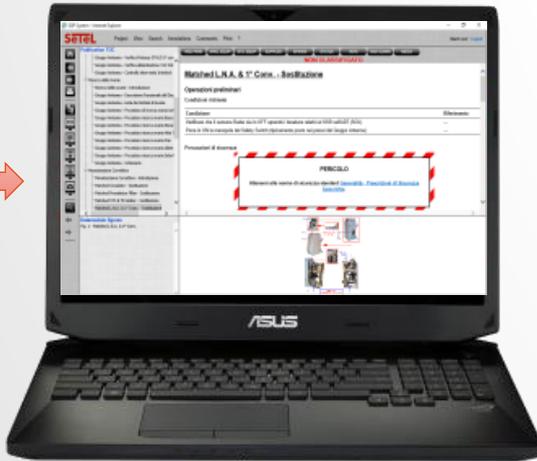
- Microsoft Word Editor Module, capable of:
 - ✓ Editing in stand-alone mode the Data Modules on pre-defined templates in a more user-friendly environment, as Microsoft Word is
 - ✓ Converting these Data Modules into xml, directly in the loading phase on the platform, by performing the formal validation, to guarantee the alignment with the Schemas and with the requirements of the Business Rules,
- or
 - ✓ Editing directly into TPS (therefore via web media) on pre-defined templates the Data Modules in a more user-friendly environment, as Microsoft Word is; converting them into xml directly on the platform, by performing the formal validation, to guarantee the alignment with the Schemas and with the requirements of the Business Rules

DMS PUBLISHING ENVIRONMENT

- This sub-process implements the functions required to define and generate the publications to be distributed for on-line and/or off-line viewing. In details, the functions involved are:
 - ✓ Generation of the Publication Modules (PM);
 - ✓ Delivery of the Publication packages (content files and stylesheets) to be viewed in the SGP SW for web (HTML) browsing;
 - ✓ Generation of the PDF publications, by the proper stylesheets, for browsing through Acrobat Reader and/or printing;
 - ✓ Generation of the Publication packages (content files and stylesheets) for off-line browsing on mobile devices (Tablets, Smartphone ...) or stand-alone PC (by means of SGP Lite);
 - ✓ Generation of the Training Documentation (PPT format), by the proper stylesheets customized on request, for browsing through Power Point;
 - ✓ Generation of the SCORM compliant Training Modules (Computer Based Training) ready for fruition by means of suitable Browser (**TPS SCORM Player** for example) or on LMS SCORM platforms (**Moodle** for example).

INTERACTIVE PUBLICATIONS MANAGEMENT SYSTEM (SGP)

DMS →



- The **Interactive Publications Management System (SGP)** is a XML Publishing Tool for the visualization and configuration management of Interactive Electronic Technical Manuals (IETM).
- Two operating environments are provided:
 - ✓ The **Administrative Environment** is dedicated to the management of Publications and Publications access;
 - ✓ The **Browsing Environment** is intended for IETP consulting.

SGP ADMINISTRATIVE ENVIRONMENT

- The application is mainly focused on the basic documentation concept as defined by the S1000D standard, adopting the XML format for the managed files. Non-XML documents however can also be managed by the module.
- The S1000D XML documents can be published via Web and Web Browser (Internet Explorer) as html pages in association with specific video stylesheets (xslt) providing a full set of fruition features; features are obviously degraded for non-XML documents, due to the limitations of non-XML formats.
- A PDF output format can also be provided.
- The S1000D IETM, originating from **DMS**, can also be published for fruition on mobile devices (Tablet, Smartphone) by **SGP Lite**.
- The following Publication types can be managed:
 - ✓ **XML S1000D Standard Publication (ver. 2.1 ÷ 2.3 - 4.1)**
 - ✓ **SGML S1000D Standard Publication (ver. 1.7 ÷ 2.1)**
 - ✓ **SGML 38784 Standard Publication**
 - ✓ **Word Document**
 - ✓ **PDF Document**

SGP BROWSING ENVIRONMENT (1/4)



- When an user is identified at Log-in as an authorized user, he can access the Publications and Documents stored in the **SGP** by means of the following functions:
 - ✓ Select a Publication by the Logistic System Tree index;
 - ✓ Select a Publication by browsing the Publications List index;
 - ✓ Select a Publication through a free text search tool;
 - ✓ *If requested, it is possible to develop an integrated 3D graphic visualizer to allow the 3D graphic navigation (Familiarization).*
- When the user has selected the Publication of interest, he is provided with a user friendly interface in order to look for the specific information of interest, by the following classes of tools:
 - ✓ Navigation indexes: Table of Contents, Index of Tables, Index of Figures;
 - ✓ Search function.

SGP BROWSING ENVIRONMENT (2/4)

- While viewing the documentation, the user is provided with additional information and choices to customize the interface in order to select the type of navigation which is most suitable to his needs.
- When viewing procedures, the user can, for example, select a "step by step" navigation; it means that the user is prompted to proceed to the next step when he has completed the current one.

The screenshot displays the SeTeL SGP System web interface. The browser title is 'SGP System - Internet Explorer'. The page header includes the SeTeL logo, navigation menus (Project, View, Search, Annotations, Comments, MMS, Print), and a user login 'User: user - Logout'. A top navigation bar contains buttons for 'REG. PERS.', 'SPEC. EQUIP.', 'STD. EQUIP.', 'SUPPLIES', 'SPARES', 'STATUS', 'REFS', 'TASK SUMM', and 'MEDIA'. The main content area is titled 'NON CLASSIFICATO' and 'Matched Preselector Filter - Sostituzione'. It includes sections for 'Operazioni preliminari', 'Condizioni richieste', 'Precauzioni di sicurezza', and 'Procedura'. A prominent warning box with red and white diagonal stripes contains the text 'PERICOLO' and 'Attenersi alle norme di sicurezza standard Generalità - Prescrizioni di Sicurezza Generiche.' The left sidebar shows a 'Publication TOC' with a tree view of document sections, including 'Manuale Tecnico ILDS FREMM - Gruppo Antenna' and various maintenance and safety topics. At the bottom, there is a 'Datamodule figures' section with a reference to 'Fig. 1 - Matched Preselector Filter'.

Matched Preselector Filter - Sostituzione

Operazioni preliminari

Condizioni richieste

| Condizione | Riferimento |
|--|-------------|
| Verificare che il radar sia in OFF aprendo i breakers relativi al SSR sull'ADT (SCU). | --- |
| Porre in ON la manopola del Safety Switch (tipicamente posto nei pressi del Gruppo Antenna). | --- |

Precauzioni di sicurezza

PERICOLO

Attenersi alle norme di sicurezza standard [Generalità - Prescrizioni di Sicurezza Generiche](#).

Procedura

1. Procedura necessaria ad estrarre l'Antenna Receiver Assy ([Antenna Head - Lista Parti Sostituibili](#)) dall'Antenna Head:
 - Svitare le sedici viti ([Fig. 1/7](#)) che fissano il coperchio posteriore dell'Antenna Head, quindi rimuoverlo.
 - Svitare le dodici viti ([Fig. 1/6](#)) che fissano il coperchio superiore dell'Antenna Head, quindi rimuoverlo.
 - Svitare le due viti ([Fig. 1/1](#)) di fissaggio dell'assieme Components Plate ([Antenna Head - Lista Parti Sostituibili](#)), quindi ribaltarlo fino al bloccaggio del compasso.

SGP BROWSING ENVIRONMENT (3/4)

- Additional information can be provided according to the type of information displayed, as in the following:
- ✓ “Req. Pers. (Personnel Required)”, “Spec. Equip. (Special Tools)”, “Std. Equip. (Standard Tools)”, “Supplies (Consumable Materials)”, “Spares (Spare Parts)”, “Status (Identifying Information)”, “Refs (References)”, “Task Summ. (Task Summary)”.

The screenshot displays the SGP System web interface. The main window shows a navigation menu on the left with a 'Publication TOC' section. A red box highlights a set of tabs at the top: 'REQ. PERS.', 'SPEC. EQUIP.', 'STD. EQUIP.', 'SUPPLIES', 'SPARES', 'STATUS', 'REFS', 'TASK SUMM.', and 'MEDIA'. A pop-up window titled 'Standard Equipment' is open, showing details for a module. The pop-up window has a red and white striped warning border and contains the following information:

Matched P
Operazioni pr
Condizioni richie
Condizione
Verificare che il r
Porre in ON la m
Precauzioni di s

Standard Equipment
Codice Data Module:
ILDSAAAAAAAAA-AAAA-HC5-11-0000-02AAA-921A-A
Denominazione: Set di chiavi maschio esagonale piegate con estremità sferica
Q.tà: 1
Part Number: Commercial
NSN: --
Ditta costruttrice: A1615
Denominazione: Set di chiavi a forchetta
Q.tà: 1
Part Number: Commercial
NSN: --
Ditta costruttrice: A1615
Denominazione: Set di giraviti lama parallela
Q.tà: 1
Part Number: Commercial
NSN: --
Ditta costruttrice: A1615
Denominazione: Chiave dinamometrica
Q.tà: 1

NON CLASSIFICATO

Antenna).

abilità - Prescrizioni di Sicurezza

SGP BROWSING ENVIRONMENT (4/4)

- While viewing documents it is possible to insert *Annotations* (public or private) to the documents that do not change the original document, but are associated to it.
- *Comments* can also be inserted that can be used as a guide for any possible revision of the documents.

The screenshot displays the SeTeL SGP System web interface. The browser title is "SGP System - Internet Explorer". The page header includes the SeTeL logo and navigation options: "Project", "View", "Search", "Annotations", "Comments", "MMS", and "Print ?". A red box highlights the "Annotations" and "Comments" menu items. Below the header, there are tabs for "REQ. PERS", "SPEC. EQUIP", "STD. EQUIP", "SUPPLIES", "SPARES", "STATUS", "REFS", "TASK SUMM.", and "MEDIA". The main content area is titled "NON CLASSIFICATO" and contains the document "Matched Preselector Filter - Sostituzione". The document content includes sections for "Operazioni preliminari", "Condizioni richieste", "Condizione", "Precauzioni di sicurezza", and a warning box with the text "PERICOLO" and "Attenersi alle norme di sicurezza standard [Generalità - Prescrizioni di Sicurezza Generiche](#)".

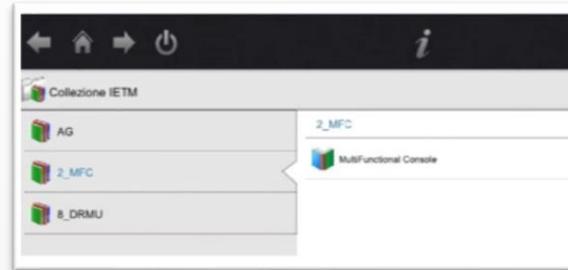
SGP-LITE (1/4)

- **SGP-Lite** is an advanced application that allows to manage and consult documentation and technical content (produced according to the standard S1000D ver. 2.3 - 4.1) by using a Tablet (IpaD™, Android™, Windows™) and other mobile devices (i.e. Smartphone).



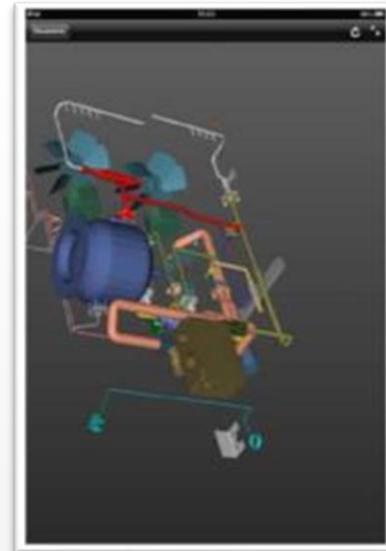
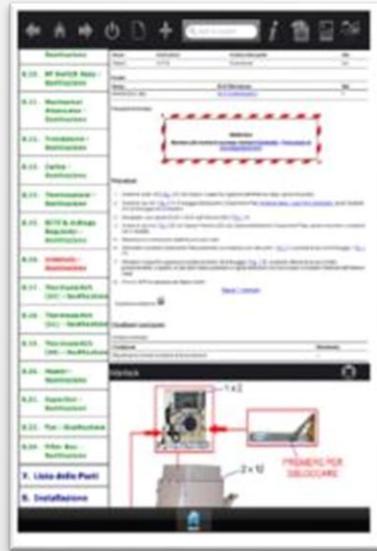
SGP-LITE (2/4)

- **SGP-Lite** is a very useful tool that in a very simple and intuitive way facilitates and supports technical activities by:
 - ✓ Consulting Publications and technical documentation (manuals, parts catalogues, project specifications, safety and emergency procedures, diagrams, archives, etc.). The information and data you need, whenever you need them and wherever you are!



SGP-LITE (3/4)

- ✓ Displaying - in a very practical way and directly at your workplace - machinery, systems, equipment, modules, work instruments, etc. through high resolution photography, diagrams and drawings both in 2D and 3D.



TRAINING DOCUMENTATION GENERATION: IDENTIFICATION OF CONTENTS

- ✓ Through the qualification of the contents of the Data Modules and / or the generation of the Training Data Modules, by means of the TPS, it is possible to generate the training documentation in Power Point format, ready to be used or customized according to the instructor's wishes.
- ✓ The process consists of the following logical steps:
 - Qualification by the editor / instructor of the contents of the Data Modules deemed suitable for teaching support;
 - Training Data Module editing to complete the training material;

Tabella 1. Dispositivi di Controllo e Comando del PDA-F

| RIF. FIGURA | IDENTIFICAZIONE | TIPO | DESCRIZIONE |
|-------------|-----------------|------------------------------|---|
| Fig.1 ref 1 | CB1 (ON / OFF) | Circuit Breaker Mondotipo | Protegge da eventuali cortocircuiti e/o sovraccarichi le parti elettriche componenti il Calcolatore |

Figura 1 - Dispositivi di Controllo e Comando del PDA-F

2 Comandi e Controlli del Power Distribution Assembly (PDA-F)

Il PDA-F (Fig. 2) contiene il Breaker CB1 per il consenso alla distribuzione della tensione di alimentazione internamente al Calcolatore (Tab.2).

Nota
Il Circuit Breaker CB1 deve essere considerato sia come dispositivo di protezione sia come dispositivo di comando per lo svolgimento delle operazioni di accensione e spegnimento e di manutenzione.

TRAINING DOCUMENTATION GENERATION: DEFINITION OF TRAINING MODULE

- TMC (Training Module Code) generation for the sequencing of the educational topics of the course;
- Export in Power Point format;

Publication contents

- ▣ Pubblicazione prova
 - 1. Informazioni Generali
 - 1.1. C2 AGIS - Introduzione
 - 1.2. C2 AGIS - LISTA DEGLI ACRONIMI E DELLE ABBREVIAZIONI
 - 1.3. C2 AGIS - Descrizione generale
 - 1.4. FILTRO ARIA, TEMP.S. - Descrizione generale
 - 1.5. C2 AGIS - Prescrizioni di sicurezza generiche
 - 1.6. CPU2 VP417+ETHP(U3) - Descrizione generale
 - 2. Operatività
 - 2.1. C2 AGIS - Procedura di Accesso
 - 2.2. C2 AGIS - Procedura di Richiusura dopo l'Accesso
 - 3. Descrizione Funzionale
 - 3.1. C2 AGIS - Descrizione funzionale
 - 4. Manutenzione Preventiva
 - 4.1. FILTRO ARIA - Pulizia
 - 4.2. PCP-V - Prova Funzionale - Lamp Test
 - 5. Ricerca Avarie
 - 5.1. C2 AGIS - Descrizione Generale della Ricerca avarie
 - 6. Manutenzione Correttiva
 - 6.1. PDA-F - Sostituzione
 - 6.2. PCP-V - Sostituzione

Publication Module

DMS System - Authoring platform - Internet Explorer

SeTeL Project DMRL Export ?

Export for Tablet
Export PDF
Export WEB (SGP) ser: * Add PMC Add TMC

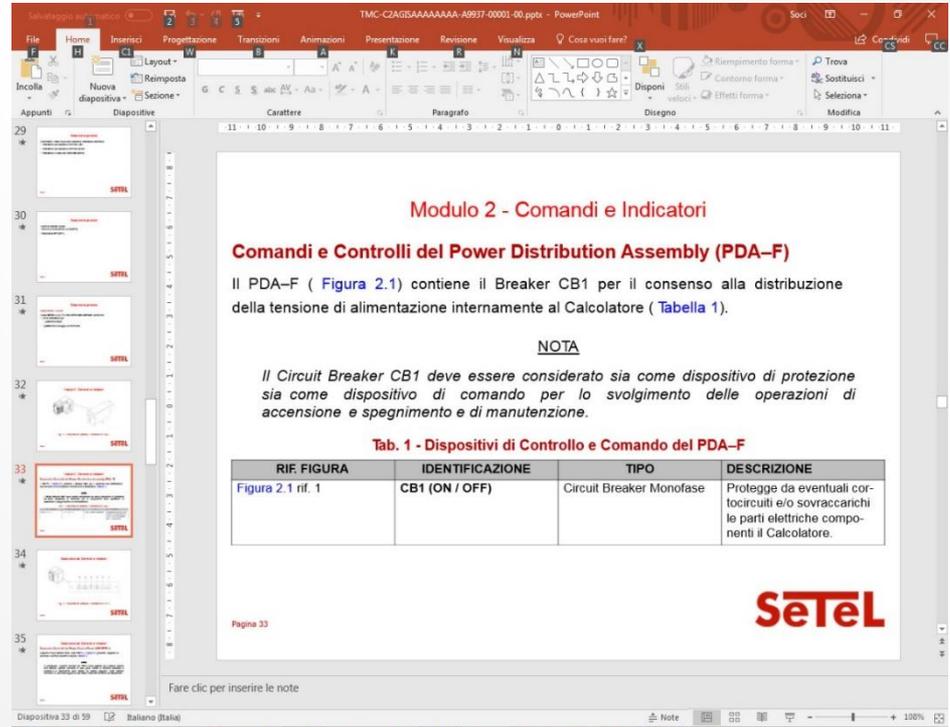
AGIS - AGIS
Publications list and status

| Publication code | Export in Power Point | in title | Date | Pub. Number (first file) | Status | PDF/PPT |
|--------------------------|-----------------------|----------|------------|--------------------------|----------------|---------|
| PMIC-C2AGISAAAAAAAAA9937 | Export in Power Point | 2AGIS | 26-05-2017 | --- | In working ... | --- |
| TMC-C2AGISAAAAAAAAA9937 | Download publication | | 01-12-2017 | --- | Completed | PC |

Export in Power Point

TRAINING DOCUMENTATION GENERATION: POWER POINT FRUITION

- Verification of training material produced in Power Point and possible enrichment through visual effects.



The screenshot shows a PowerPoint slide with the following content:

Modulo 2 - Comandi e Indicatori

Comandi e Controlli del Power Distribution Assembly (PDA-F)

Il PDA-F ([Figura 2.1](#)) contiene il Breaker CB1 per il consenso alla distribuzione della tensione di alimentazione internamente al Calcolatore ([Tabella 1](#)).

NOTA

Il Circuit Breaker CB1 deve essere considerato sia come dispositivo di protezione sia come dispositivo di comando per lo svolgimento delle operazioni di accensione e spegnimento e di manutenzione.

Tab. 1 - Dispositivi di Controllo e Comando del PDA-F

| RIF. FIGURA | IDENTIFICAZIONE | TIPO | DESCRIZIONE |
|---------------------------------|-----------------|--------------------------|--|
| Figura 2.1 n. 1 | CB1 (ON / OFF) | Circuit Breaker Monofase | Protegge da eventuali cortocircuiti e/o sovraccarichi le parti elettriche componenti il Calcolatore. |

Pagina 33

Fare clic per inserire le note

Dispositiva 33 di 59 Italiano (Italia) 100%

TPS SCORM PLAYER

The TPS is able to automatically generate, starting from a whole Data Module or part of it, SCORM® instructional objects in form of Content Object.

These objects can be automatically inserted in our CBT Browser in order to create a real CBT/E.Learning courseware, SCORM® compliant, configuration controlled...



1 DM = 1 CONTENT OBJECT

TPS vs LMS

... otherwise they can be integrated in a LMS platform and fruited using the interface of the platform itself.

In case of SCORM objects generated by TPS and imported in a LMS platform (MOODLE in the figure), the single Datamodules will be the Content Object of CBT.

Dashboard / I miei corsi / SCORM-TPS / Lezione 1 / Lezione 1 - SCORM da TPS

Lezione 1 - SCORM da TPS

Documentazione Didattica

- Antenna Group
 - CBT SCORM ANTENNA UNIT
 - Descrizione Generale

Figura 3 - Composizione dell'Antenna MIM

I componenti principali del Gruppo Antenna sono:

- Antenna Unit;
- Antenna Head;

In this way it can be created a coherent objects set (that meets standard and coming from the same engineering-documentary data) generated starting from the technical publication developed by the TPS and comprising.....



ADVANTAGES



Activate a CBT/E-learning development process, starting from a pre-worked design base, standardized and configuration controlled. The SCORM® objects generated by the TPS can in fact be used, according to the needs:

- «as they are», for the direct editing of low cost, non sophisticated CBT courseware;
- as instructional materials on which the SeTeL can design and develop further enrichments in terms of multimedia, user services, interactivity, simulations, etc.



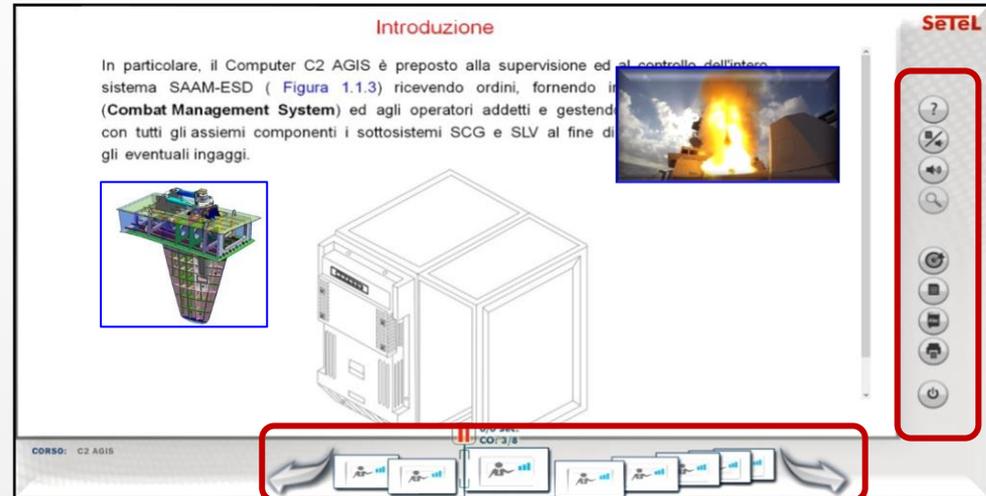
Arrange immediately, with engineering levels coherent with the requested requirements, a fully SCORM® compliant architecture able to ensure, on the contents, the highest level of:

- modularity;
- reusability;
- maintainability;
- traceability;
- integration with the technical documentation.



Get, as relapse, a time/costs optimization in the training development, deriving by:

- a significant unification of the realization process of the training and technical publication materials;
- a consequently rationalization of the needed resources.



TPS – POINTS OF STRENGTH (FUNCTIONS)

- ✓ Interface with the Logistic Data Base (dump file 1388-2B format) to ensure the alignment with the Logistic/Product configuration tree and data (*upcoming implementation the interface with the Logistic Data Base S3000L format*);
- ✓ Apply of Custom Guidance (through BREX Data Module) for each Project;
- ✓ Accurate indication and control of the roles (Work Flow), **Authors-Reviewer-Publisher-Trainer**;
- ✓ Automatic Generation of the Data Modules «Validated Template» (S1000D ver. 2.3 – 4.1) where all the “Idstatus” information are preloaded, and in particular for the procedural Data Modules (if generated by Logistic Data Base) also the logistic data are preloaded too (“preliminary requirements” section);
- ✓ Automatic Generation of the pre-compiled Data Module «MS WORD Templates» in order to simplify the writing of Data Modules to authors who have no S1000D and XML skills;
- ✓ Automatic generation of the IPD Data Modules (S1000D ver. 2.3 – 4.1);
- ✓ Generation of the Training Documentation (PPT format), by the proper stylesheets customized on request, for browsing through Power Point;
- ✓ Generation of the Training Modules (SCORM compliant) ready for off-line fruition by means of suitable Browser (**TPS SCORM Player** for example).

TPS – POINTS OF STRENGTH (MULTI-OUTPUT)

- ✓ From a single CSDB, different outputs are available in configuration control:



WEB IETM



Stand-Alone IETM (PC, Tablet, Smartphone)



Printable Version (PDF)



Training Documentation (Power Point)



SCORM Content Package