

e-DGS/960/29.07.2025

PROCES VERBAL DE RECEPȚIE

În perioada 10.06.2025 – 30.06.2025 furnizorul ATDI S.A. a asigurat serviciile de mentenanță și suport pentru Sistemul Informatic Integrat pentru Gestiunea Spectrului Radio în conformitate cu termenii și clauzele prevăzute în Acordul e-SC 4408/20.05.2025 și în Contractul subsecvent nr. 1 e-SC 5008/10.06.2025 și au fost corespunzătoare din punct de vedere cantitativ și calitativ, reflectate în raportul furnizorului înregistrat în ANCOM cu nr. SC-15102 / 21.07.2025 aprobat, fiind în valoare de 14.000 Euro fără TVA, respectiv 16.800 Euro (inclusiv TVA).

Secțiunea 1: suportul, mentenanța HTZ Communications

1. A fost reînnoită și livrată licența de acces la actualizări software funcționale și de securitate pe toată perioada Acordului Cadru.

DELIVERY NOTE



Date: 17 Jun 2025

THIS DELIVERY NOTE IS CREATED FOR ANCOM

License Owner: ANCOM

License valid from: 29 Jan 2021

License valid until: Perpetual

Maintenance from: 29 Jan 2021

Maintenance until: 09 Jun 2029

Number of CAL(s): 30+20

Name of software: HTZ communications

Type of license: Server

Access to CRM:

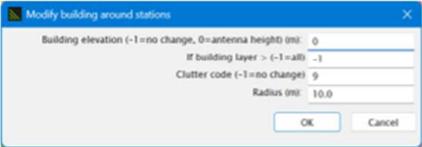
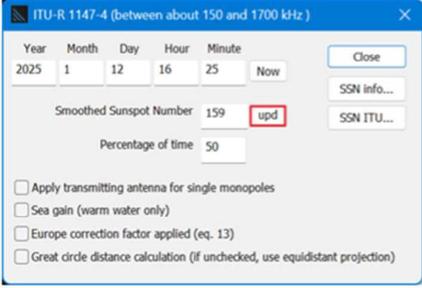
virgilius.stanciulescu@ancom.org.ro

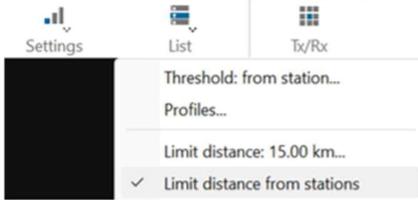
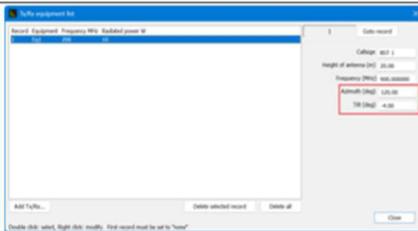
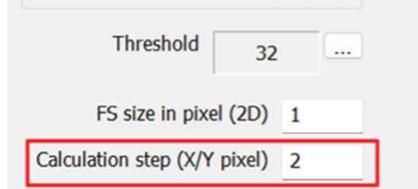
2. S-au livrat și recepționat:

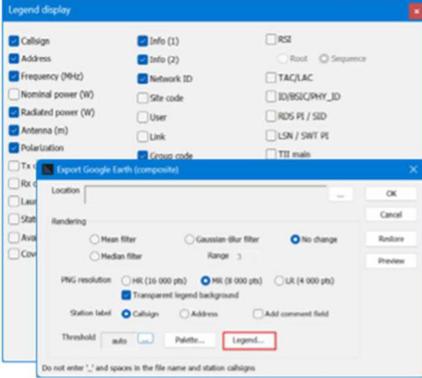
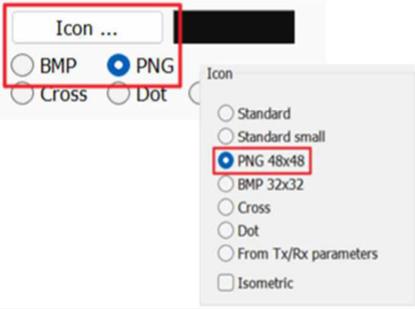
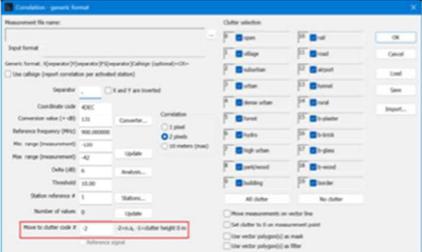
- update-uri funcționale ale HTZ Communications versiunea V2024.5 (versiunea la zi la momentul începerii contractului conținând funcții și caracteristici noi și actualizări ale

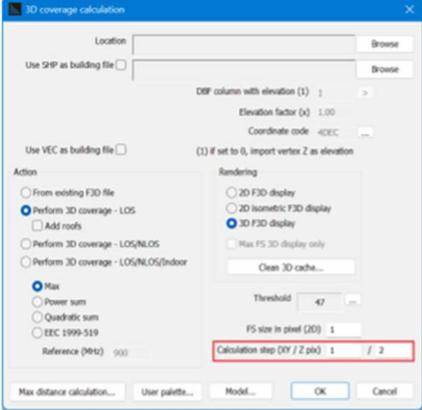
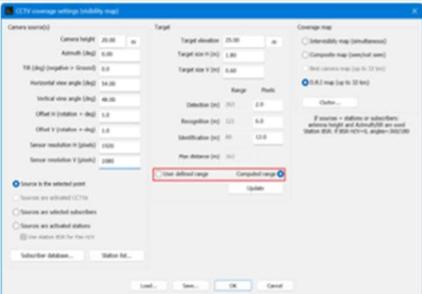
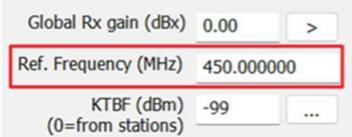
funcțiilor existente. S-au livrat toate funcțiile noi și modificările introduse de la ultima versiune în funcțiune în ANCOM

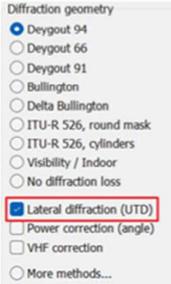
Noutatile și modificările principale sunt prezentate pe scurt in tabelul urmator.

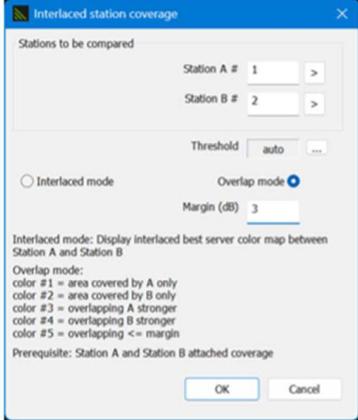
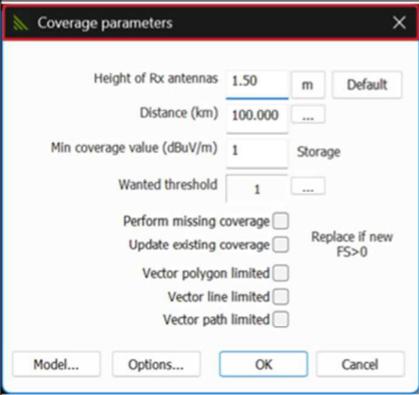
Version	Type	Function name and snapshot	Domain	Description
V2024.12	MODIF	OBJECT/SITE COORDINATES/ Modify Clutter/Building according to station location...	Interface	An option to change the building heights has been added. If set to 0, the new building height will be set according to the station antenna height. This option applies only if the station(s) is(are) located on a building.
				
V2024.12.1	MODIF	FILE/SHARE/EXPORT GOOGLE EARTH/...	Interface	The export of data to Google Earth format has been improved and is faster.
V2024.12.1	MODIF	Display of coverage results, DTM and Clutter layer	Interface	The parallelism has been removed from these features to solve compatibility issues with Apple Silicon processors and some Intel Xeon processors.
V2024.12.1	MODIF	Conversion from metric projection to 4DEC/4SEC	Interface	The matrix conversion from metric projection to 4DEC/4SEC is now faster with a resolution of 0.1 arcsecond (virtual matrix transformation). This is used in the Google Earth export, the display of ITU Rain map, Conductivity map, UTM zones, Earth radius map, Night and Day map and in the ITU-R P.1147, ITU-R P.368 and Great circle distance calculations.
V2024.12.1	MODIF	Project Manager	Interface	In the Project manager, the path ellipsis included in the path to each file have been removed for each layer attached to the project.
V2024.12.1	MODIF	Project Manager	Interface	When browsing a given layer with a defined file, the folder containing the file attached to the project is open by default.
V2025.1	MODIF	SHORT BUTTON/EXPORT SCREEN/ Export PNG tiles + AI mask predict...	Interface	A new AI model has been implemented.
V2025.1	MODIF	TOOLS/Propagation model...	Calculations	New formulas have been implemented to fix ITU-P.526 equations (67) and (68) in the "Lateral diffraction (UTD)" model.
				
V2025.1	MODIF	TOOLS/Propagation model...	Calculations	The ITU table of SSN indices has been updated to include values from January 2000 to December 2025 for the ITU-R P.1147 model.
				

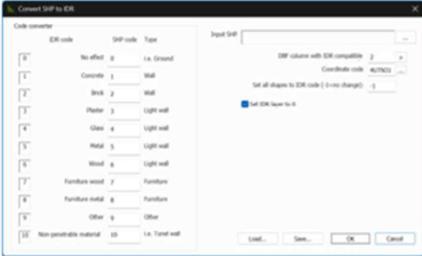
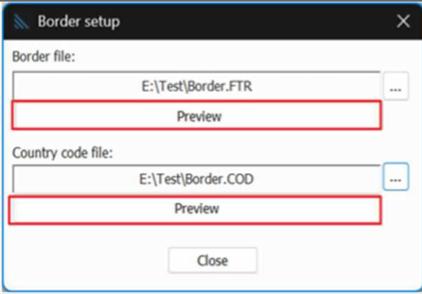
Version	Type	Function name and snapshot	Domain	Description
V2025.1	MODIF	SUBSCRIBER/POINT TO POINT/ALL SERVERS/ Omni directional antenna SUBSCRIBER/POINT TO POINT/ALL SERVERS/ Directional antenna SUBSCRIBER/POINT TO POINT/BEST SERVER/ Omni directional antenna SUBSCRIBER/POINT TO POINT/BEST SERVER/ Omni directional antenna	Fixed radiocom. (MW and PMP)	The limit distance from station parameters is now supported.
				
V2025.1	MODIF	FILE/IMPORT/ON MAP STATION/From TD3... FILE/IMPORT/ON MAP STATION/From RD1	Interface	The import of the station altitude has been added.
V2025.1	MODIF	RIGHT-CLICK ON MAP/ADD STATION/ Tx/Rx from list	Interface	The azimuth and the tilt can now be user defined.
				
V2025.1	MODIF	MAP/RASTER OPERATION/MODIFY CLUTTER/ IGN Clutter and Buildings builder...	Interface	This feature has been modified to cope with the new IGN vector format (BD topo).
				
V2025.1	MODIF	RECTANGLE TOOL/3D coverage... POLYGON TOOL/3D coverage...	Calculations	A computing step in the horizontal plane has been added. It allows reducing the computing time.
				

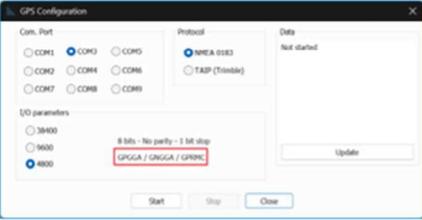
Version	Type	Function name and snapshot	Domain	Description
V2025.1	MODIF	FILE/SHARE/EXPORT GOOGLE EARTH/ GE coverage and stations... FILE/SHARE/EXPORT GOOGLE EARTH/	Interface	A station field selector has been added (Legend button). It allows selecting the fields to be exported in the description of the station in Google Earth.
				
V2025.1	NEW	STATION PARAMETERS/ Site tab	Interface	The support for PNG icons for the stations has been added. PNG files must be located in the "/Base//Pics" folder. The "PNG 48x48" option of the "Icon" section of the "Object properties <F5>" must be selected to display PNG icons.
				
V2025.1	MODIF	MAP/BORDER/Border builder... MAP/BORDER/Country code builder...	Spectrum management	The USA border vectors (USA_adm0) have been modified (from Multi-part polygons to Single-part polygons). They are delivered with the installation package in the "/Borders" folder.
V2025.1	MODIF	MEASURE/CORRELATION/ Correlation generic format (X Y E)... MEASURE/IMPORT DRIVE TESTS/ DT generic format (X Y E)...	Interface	The "Move to clutter code #" option has been added. Each measurement point is relocated with the following rules: - If set to "-2", no change; - If set to "-1", move to the nearest clutter code with a height equal to 0 in the clutter settings, including building if a height of 0m is set in the Building layer. - If set between 0 and 19, move to nearest location with the specified clutter code.
				

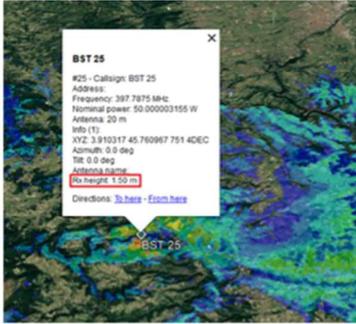
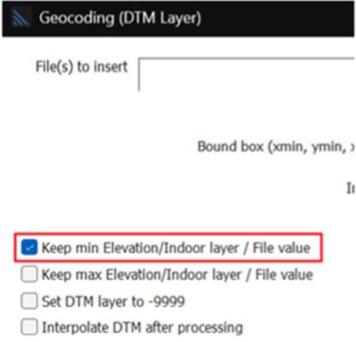
Version	Type	Function name and snapshot	Domain	Description
V2025.2	MODIF	RECTANGLE TOOL/3D coverage... POLYGON TOOL/3D coverage...	Calculations	A calculation step in the vertical plane (Z) has been added. The step is defined in meters. The 3D coverage calculations will be made from the ground to the top of each building with the specified step.
				
V2025.2	MODIF	RIGHT-CLICK ON MAP/COVERAGE/CCTV coverage...	Calculations	The calculation ranges (max distance and DRI distance) can now be user defined.
				
V2025.2.1	MODIF	Command line	Interface	Action code #1022 has been modified in the following way: Automatic connection to the pre-defined SQL link, extraction of the stations within map boundary with a filter applied on the "Call Number" field. Then the selected stations are imported on the map and the coverage of activated and deactivated stations is performed using the PRM file attached to the project. The coverage results are finally sent back to the SQL table. Notes: - The sampling factor is forced to 1. - In the STATIONX64 table, the "Call_no" field is corresponding to the "Call Number". For more details, please refer to http://data.atdi-group.com/doc/HTZ_API_ACTION_CODES.pdf .
V2025.2.1	MODIF	SETTINGS BUTTON/Threshold	Interface	The reference frequency (used to convert dBμV/m to/from dBm) is now always updated when a coverage is displayed on the map. It is updated according to the frequency used for the coverage calculation of the last object considered.
				

Version	Type	Function name and snapshot	Domain	Description
V2025.2.1	NEW	Object tree view (right bar)	Interface	Options have been added to isolate objects according to their type (Tx/Rx, DF, Radar, ...). Right click on the top line to access to these options.
				
V2025.2.1	MODIF	MAP/RASTER OPERATION/GEOCODING/ XYZ - Lidar...	Interface	An option has been added to repair LAZ or LAS files when the header is not consistent with the content.
				
V2025.2.1	MODIF	TOOLS/Propagation model...	Calculations	The correction due to lateral diffraction (UTD model) is not more applied if lateral obstacles are greater than vertical obstacle.
				

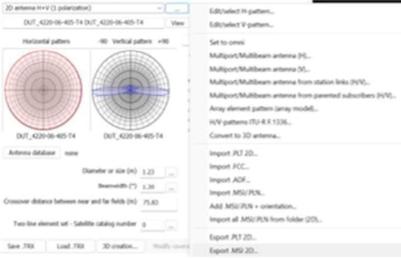
Version	Type	Function name and snapshot	Domain	Description
V2025.2.1	NEW	COVERAGE/NETWORK ANALYSIS/ 2 site interlaced server map... COVERAGE BUTTON/Interlaced servers...	Calculations	The "Overlap mode" option has been added. The results displayed are the following: No color: No coverage. Color #1: Areas covered by station A only (if FSR/PR A >= threshold). Color #2: Areas covered by station B only (if FSR/PR B >= threshold). Color #3: Areas covered by station A and station B with FSR/PR A > FSR/PR B+margin (if FSR/PR A and B >= threshold). Color #4: Areas covered by station A and station B with FSR/PR B > FSR/PR A+margin (if FSR/PR A and B >= threshold). Color #5: Areas covered by station A and station B with FSR/PR A - FSR/PR B <=margin (if FSR/PR A and B >= threshold).
				
V2025.2.1	MODIF	BIM layer	Interface	The current WMS server used to display background images is now saved in the PRM file.
V2025.2.1	NEW	Color interface	Interface	The small color interface has been modified and is compatible only with Windows 10 and Windows 11.
				
V2025.3	MODIF	Callsign and MW Ident	Interface	The length of the Callsign and the MW Ident has been increased to 16 characters.

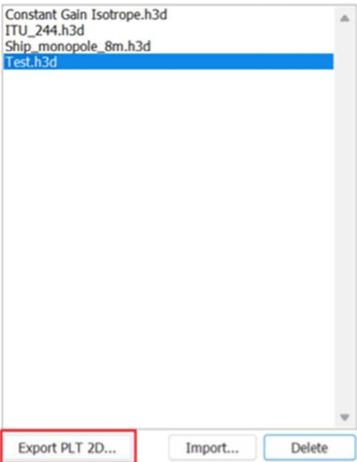
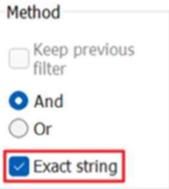
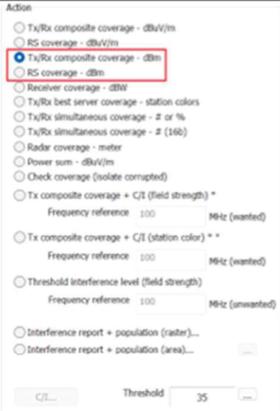
Version	Type	Function name and snapshot	Domain	Description
V2025.3	NEW	MAP/RASTER OPERATION/Indoor builder...	Interface	The "Set all shapes to IDR code" option has been added. If used, the specified IDR code will be assigned to all the walls contained in the SHP dataset. This is useful when the DBF file doesn't contain information about the materials used. If the value is set to "-1", the IDR code set in the specified column of the DBF file will be assigned.
				
V2025.3	MODIF	MAP/BORDER/Border setup...	Spectrum management	A preview has been added to display the FTR or the COD file on the map.
				
V2025.3	MODIF	MAP/BORDER/Border setup... MAP/BORDER/Border builder... MAP/BORDER/Country code builder...	Spectrum management	The FTR and COD files are now geocoded in the current projection of the project. They will work then whatever the projection of the DTM. However, it is more accurate to use the same projection for the FTR/COD files and the DTM.
V2025.3	NEW	MAP/BORDER/Border builder... MAP/BORDER/Country code builder...	Spectrum management	The Russia border vectors (RUS_adm0) have been modified (from Multi-part polygons to Single-part polygons). They are delivered with the installation package in the "/Borders" folder.
V2025.3	MODIF	FREQUENCY ASSIGNMENT (Point to point and coverage modes)	Spectrum management	The bandwidth set in the frequency plans, the frequency groups and in the frequency bands is now assigned to the stations and the MW links.
V2025.3	MODIF	MAP/Properties (<F3>)...	Interface	The "Edit BIM key..." feature has been added. To be used to change the pathCache folder. The project must be reloaded for the changes to take effect. This feature is not available if the "StartUp.BIM" is loaded in the project since in this case, the pathCache folder is always set to /Projects/BIM.
				

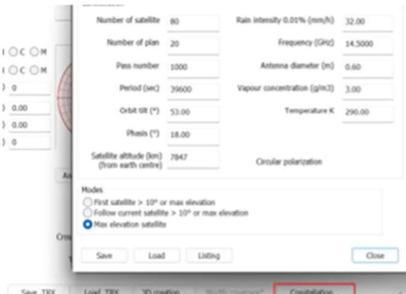
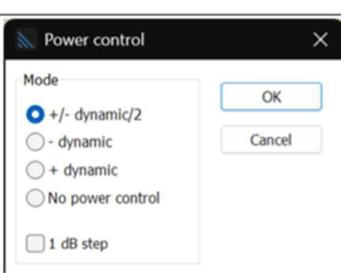
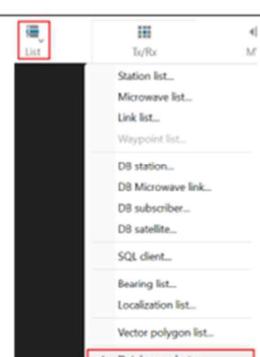
Version	Type	Function name and snapshot	Domain	Description
V2025.3	MODIF	FREQUENCY ASSIGNMENT (Point to point and coverage modes)	Spectrum management	The bandwidth set in the frequency list is now assigned to the stations and the MW links.
V2025.3	MODIF	FILE/SHARE/EXPORT GOOGLE EARTH/ GE coverage and stations... FILE/SHARE/EXPORT GOOGLE EARTH/ GE site by site coverage... FILE/SHARE/EXPORT GOOGLE EARTH/ GE SBS result - server limited...	Interface	If there is no coverage displayed on the map, no PNG file will be created.
V2025.3	MODIF	GPS...	Interface	The "GNGGA" messages can now be treated.
				
V2025.3	MODIF	TRX files	Radar	The radar pulse parameters are now saved/loaded with TRX files.
V2025.3	NEW	PATH/Flight track...	Calculations	The "Flight track" feature is now available in HTZ communications.
V2025.3	NEW	PATH/Flight track...	Mobile radiocom.	The "4G/5G..." option has been added. The calculations performed are the same as the ones made by the "4G/5G connectivity report" feature of the Subscribers menu, but considering a virtual mobile moving along the flight track.
				
V2025.3	MODIF	FREQUENCY ASSIGNMENT (Point to point and coverage modes)	Spectrum management	The bandwidth and the duplex spacing parameters set in the frequency list are now saved/reloaded in the FAP and FAC files.
V2025.3	MODIF	FILE/IMPORT/ON MAP STATION/ITU notice...	Spectrum management	
V2025.3	NEW	ICS manager noDB	Spectrum management	A new release of ICS manager noDB has been implemented and is delivered with the installation package.
V2025.3	MODIF	STATION POPUP MENU/Link to (1 way) STATION POPUP MENU/Link to (2 ways)	Interface	An option has been added to link the stations using a given station number.
				

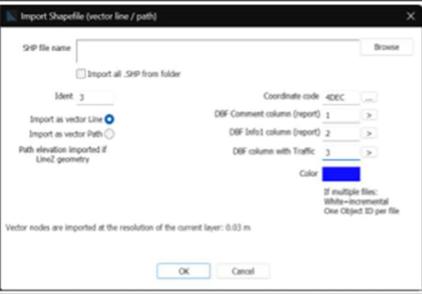
Version	Type	Function name and snapshot	Domain	Description
V2025.3	MODIF	FILE/SHARE/EXPORT GOOGLE EARTH/ GE site by site coverage...	Interface	The receiving antenna height used to perform the coverage of each station has been added.
				
V2025.3	MODIF	MAP/RASTER OPERATION/GEOCODING/ Geocode to DTM layer...	Interface	The "Keep min Elevation/Indoor layer / File value" option has been added. If checked the minimum value between the current one set in the DTM/IDR file loaded in memory (if different from -9999) and the one coming from the file being imported (if different from -9999) will be allocated to the point considered.
				
V2025.4	MODIF	Main design	Interface	Some design improvements in the user interface have been made to be compatible different Windows versions.
V2025.4	MODIF	Display of Text vectors	Interface	It is now possible to display the location of text vectors. The color used is the same as the one set for the vector text background color.
V2025.4	NEW	Station treeview	Interface	A double click on a given record of the tree view (right panel) will move the cursor to the selected station location.
V2025.4	MODIF	GPS...	Interface	Up to 5 digits for the decimal minutes are now supported ("ddmm.mmmmm") for the coordinates (Longitude and Latitude).
V2025.4	NEW	ICS manager noDB	Spectrum management	A new release of ICS manager noDB has been implemented. The new BRIFIC format (described in https://www.itu.int/ITU-R/terrasys/docs/db-changes/changes/) is now supported (starting from version BR IFIC 3042).

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V2025.4	MODIF	TOOLS/Clutter settings	Calculations	<p>The "dB/km" model has been modified as follows:</p> <p>Penetration in vegetation:</p> <ul style="list-style-type: none"> - The gamma coefficient (dB/m) is now computed using the formula: $10^{(0.8 \cdot \log_{10}(\text{fMHz}) - 0.04)}$ regardless of the vegetation model (autoveg ("-5") or P833 ("-2, -3, or -4")); - If a terrain obstacle is present between the transmitter and receiver, the vegetation penetration attenuation is always set to 0dB, and only diffraction is applied. <p>Note: Since the IUT-R P. 833 recommendation can provide high attenuation and the formulas are empirical, a diffraction model is preferred for vegetation, using a low diffraction factor to be applied to wood/forest-type clutter classes.</p> <p>Penetration in buildings:</p> <p>The total attenuation is the sum of:</p> <ul style="list-style-type: none"> - The attenuation computed at the building entrance by diffraction (if a terrain obstacle is crossed between the transmitter and the receiving point) or by penetration in the absence of a terrain obstacle; - The attenuation of "Building entry loss" in dB; - The fixed attenuation (in dB) and the linear attenuation (in dB/km) defined in the "dB/km" model parameters. <p>Note: If there is a terrain variation between the building entrance and a given point inside the building that creates diffraction (for example, the terrain is sloping), the terrain obstacle is not taken into account, as the terrain is generally flat. The extrusion function can be used to level the terrain where buildings are located.</p> <p>Please refer to http://data.atdi-group.com/doc/Clutter attenuations.pdf for more details.</p>
		 <p>Clutter attenuation</p> <ul style="list-style-type: none"> <input checked="" type="radio"/> dB/km <input type="radio"/> Flat+diffraction <input type="radio"/> CCIR <input type="radio"/> User <input type="radio"/> Tuning <input type="radio"/> None <input type="radio"/> TSB-88 (30-941 MHz) <input type="radio"/> UER 		
V2025.4	MODIF	Map layer <F4>	Interface	The maximum number of pings for the Here servers has been increased.
V2025.4.1	MODIF	SQL connections	Interface	The colors of the dialog boxes have been changed.
		 <p>Registering Database</p> <p>Identification Name:</p> <p>Connection type:</p> <ul style="list-style-type: none"> <input type="radio"/> Access MDB <input type="radio"/> SQL Server <input type="radio"/> Oracle client <input type="radio"/> Oracle Managed ODP.Net <input type="radio"/> SQLite <input type="radio"/> ODBC .Net <p>OK Cancel</p>		

Version	Type	Function name and snapshot	Domain	Description
V2025.4.1	NEW	STATION PARAMETERS/Patterns tab	Interface	The export of the 2D antennas to MSI format (360 values for H and V patterns) has been added.
				
V2025.4.1	NEW	<CONTROL+SHIFT+o> shortcut	Interface	This feature is displaying a simultaneous server map.
V2025.4.2	MODIF	GDAL library	Interface	A new release of the GDAL library. For compatibility reasons, remove the folder OSGeo4W64 or uninstall HTZ first, before reinstalling this updated version.
V2025.4.2	MODIF	FILE/PRINT/Print polygon by polygon...	Interface	This feature will print one composite coverage map per vector polygon, filtered inside each polygon. The title of the map is the comment of the vector polygon considered. For each level of the current palette, the percentage of polygon area covered is listed in the legend. This percentage is computed according to the area covered by the values greater than or equal to the level considered. A composite coverage must be first displayed on the map.
				
V2025.4.2	MODIF	GPS...	Interface	Error messages have been added.
V2025.4.2	MODIF	FILE/SHARE/EXPORT GOOGLE EARTH/ GE coverage and stations...	Interface	The export of stations and MW links can now be made even if there is no coverage displayed on the map (except in API mode).
V2025.4.2	NEW	SHORT BUTTON/EXPORT SCREEN/ Export maps to GEOTIFF (RGB)...	Interface	This feature will export the background images of the entire project to GEOTIFF (RGB) files and for the current zoom level.
V2025.5	MODIF	Constellation parameters	Satellite	The csv listing has been simplified. It is proving now: - Elevation (deg): Elevation of the satellite in degree; - Azimut (deg): Azimut of the satellite in degree; - a001: Rain attenuation in dB; - sigma: Standard deviation of the distribution of the scintillation losses computed according to ITU-R P.618 recommendation.
				

Version	Type	Function name and snapshot	Domain	Description
V2025.5	NEW	TOOLS/HF propagation...	Interface	The export to PLT 2D files has been added to the "H/V Plot" tab.
				
V2025.5	NEW	OBJECT/ACTIVATION/Activate by query... OBJECT/ACTIVATION/Mask by query... OBJECT/ACTIVATION/Isolate by query... STATION DATABASE/Select... STATION DATABASE/Filter...	Interface	The "Exact string" option has been added. If checked, the selection by string fields will consider only the exact string(s) defined.
				
V2025.5	NEW	STATION DATABASE/Coverage	Calculations	The following options have been added: - "Tx/Rx composite coverage - dBm": Displays the composite coverage of the selected stations in dBm unit. - "RS coverage - dBm": Displays the RS coverage of the selected stations in dBm unit (valid only for 3G, 4G and 5G stations).
				

Version	Type	Function name and snapshot	Domain	Description
V2025.5	NEW	STATION PARAMETERS/Patterns tab	Satellite	The "Constellation..." option has been added. It will update the Azimuth, Tilt and BSR H/V parameters according to the min/max angles of the constellation orbit seen from the selected station.
				
V2025.5	MODIF	SUBSCRIBER/PARAMETERS/ Adjust parented subscriber power...	Fixed radiocom. (MW and	In this feature, the power control of the subscribers is now made according to either the Global threshold or the receiving threshold of the parent station (in "Threshold from stations" mode).
				
V2025.5	MODIF	TOOL BAR/List button	Interface	The "Database selector" option has been added. If it is not checked, the current selected database will open. If checked, the database selector will open.
				
V2025.5	NEW	FILE/IMPORT/Import generic stations/subscribers...	Interface	The "Threshold RS (dBm)" parameter can now be imported.
				
V2025.5	NEW	ICS manager noDB	Spectrum management	A new release of ICS manager noDB (V2025.05.02) has been implemented and is delivered with the installation package.

Version	Type	Function name and snapshot	Domain	Description
V2025.5	MODIF	FILE/IMPORT/VECTOR LAYER/ Import SHP line / Path...	Interface	The "Traffic" field has been added to the vector lines and can now also be imported from SHP files.
				
V2025.5	NEW	SPECTRUM/NATIONAL / REGIONAL/ PL: RSRP vs Throughput map	Mobile radiocom.	This feature will create a downlink throughput map (in Mbps) based on the RSRP level received on each point and the bandwidth of the best server station. The following tables have been implemented (based on "Signal parameter measurements and throughput estimation in 4G/5G networks" document, June 22, 2023 - Poland): - LTE TDD/FDD/5G FDD for 5, 10, 15 and 20 MHz bandwidths; - 5G TDD for 20,40,80 and 100 MHz bandwidths. The stations must be of 4G and/or 5G types with a coverage attached.
V2025.5	NEW	STATION DATABASE/Coverage	Mobile radiocom.	The "RSRP vs Throughput coverage map (UKE method)" option has been added. It generates the same map as the one created from the stations on the map and the "Spectrum/NATIONAL / REGIONAL//PL: RSRP vs Throughput map" feature.
				
V2025.5	MODIF	Coverage button/... Flow button/...	Interface	The "Coverage" and "Flow" buttons options have been re-organized: - the "Export screen" features are now all merged in the "Flow" button; - the "Active view" submenu has been created in the "Coverage" button; - the different options of the "Coverage" button are now sorted differently.
V2025.5	MODIF	Geostationary arc	Satellite	The "seen" / "not seen" info has been added for the azimuth angles computed for the geostationary arc defined and the station considered.
				

Version	Type	Function name and snapshot	Domain	Description
V2025.5	MODIF	REPORT/STATION POLYGONS/ Station polygon/extended radius covered...	Interface	This feature now reports the area covered in km ² for each clutter code (from 0 to 19).
		<p>The screenshot shows a dialog box titled "Percentage covered" with a close button (X). It is divided into two main sections: "Clutter selection" and "DEM selection".</p> <p>Clutter selection: A list of 20 clutter codes (0-19) with checkboxes. Codes 0-19 are: 0 open, 1 village, 2 suburban, 3 urban, 4 dense urban, 5 forest, 6 hydro, 7 high urban, 8 park/wood, 9 building, 10 rail, 11 road, 12 airport, 13 tunnel, 14 rural, 15 b-plaster, 16 b-brick, 17 b-glass, 18 b-wood, 19 border. There are "All clutter" and "No clutter" buttons below the list.</p> <p>DEM selection: Includes "minimum elevation (m)" (117), "maximum elevation (m)" (1632), and "Threshold:" (auto). There is a "Stations..." button.</p> <p>Option: Radio buttons for "Extend radius covered" (selected) and "Station polygon covered".</p> <p>Buttons: "OK" and "Cancel".</p>		

Secțiunea 2: suportul, mentenanța IRF Allocations

3. A fost reînnoită și livrată licența de acces la actualizări software funcționale și de securitate pe toată perioada Acordului Cadru.

DELIVERY NOTE



Date: 17 Jun 2025

THIS DELIVERY NOTE IS CREATED FOR ANCOM

License Owner: ANCOM

License valid from: 19 Dec 2022

License valid until: Perpetual

Maintenance from: 19 Dec 2022

Maintenance until: 09 Jun 2029

Number of CAL(s): 3

Name of software: RF allocation editor

Type of license: Server

Access to CRM:
clementa.dohotariu@ancom.org.ro

Secțiunea 3: suportul, mentenanța, administrarea și arhitectura sistemului

4. A fost reînnoită și livrată licența de acces la actualizări software funcționale și de securitate pe toată perioada Acordului Cadru.

DELIVERY NOTE



Date: 17 Jun 2025

THIS DELIVERY NOTE IS CREATED FOR ANCOM

License Owner: ANCOM

License valid from: 29 Jan 2021

License valid until: Perpetual

Maintenance from: 29 Jan 2021

Maintenance until: 09 Jun 2029

Number of CAL(s): 450 - unlimited

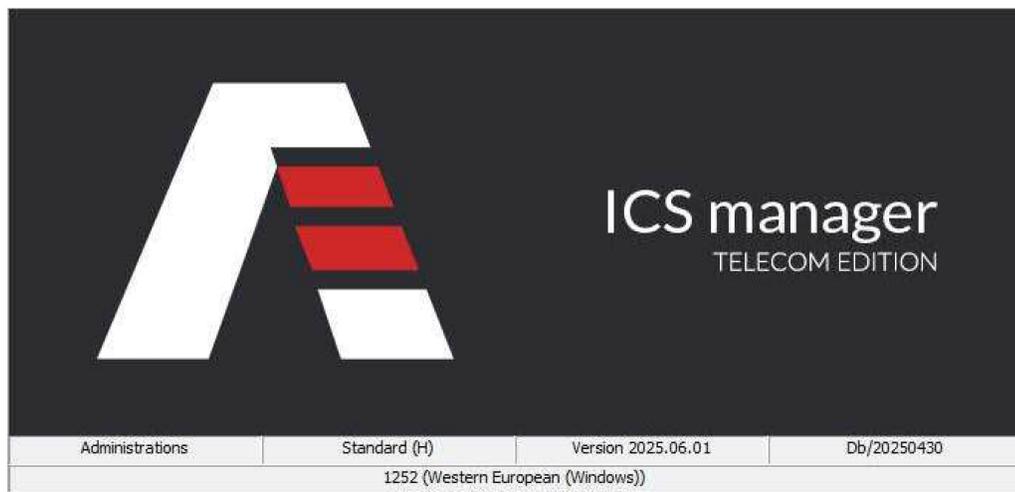
Name of software: ICS manager

Type of license: Server

Access to CRM:

virgilius.stanciulescu@ancom.org.ro

5. A fost livrat și instalat ICS MANAGER, versiunea ICSM 2025.06 pe mediul de test, initial, pentru testarea noilor functii si actualizarea modului de lucru.



6. Au fost introduse urmatoarele modificari sau corectii relativ la administrarea si utilizarea sistemului, comparativ cu ultima versiune utilizata de ANCOM, ICSM 2024.12:
 - Corectie: Erori corectate la importul/exportul alocațiilor: blocari ocazionale ICSM
 - Optiune noua: Un nou algoritm pentru generarea parolelor atunci când lungimea necesară este ≥ 16 , asigurând utilizarea cifrelor/literelor mici/literelor mari/caracterelor speciale.

- Opțiune nouă: Utilizarea fișierului .EXC pentru a evita partajarea aceluiași spațiu de lucru. Astfel se corectează erori ca „drepturi insuficiente pentru a crea fișierul” datorate unui spațiu de lucru deschis de altcineva
- Opțiune nouă: Execuția ca /RT sau /PLUG: orice eroare de blocare este acum logată în jurnal
- gimapi32.dll utilizată în interfața ITU V10.0 rulează acum ca proces separat GimapiServer.exe
- Customers: Câmpurile LEVEL, ZONE, MAIN_DPT, NEIG_DPT sunt pseudo custom
- Openlayers Map controls (Spectrum Analysis menu, wkt editor...) este bazată acum pe WebView2
- Corecție: USERS.CUST_NBRx -> float8, Fappl_XXX.xml : RenewalMinDaysBE, <!-- --> Browse record: interruptible, memory overflow
- Adădat suport pentru Full globe areas and #wkt(FULLGLOBE) în Oracle și SQLite databases. În SQL Server databases, fullglobe with holes are supported, but not in Oracle and SQLite databases
- MS Access discontinued: The Microsoft Access .MDB is no more supported for the ICS Manager database. The main reason is that spatial geography is not supported in MS Access : functions like search free channels, search potential interferers or spectrum analysis do not work. So, it is no more possible to create ICSM tables in an empty MDB, however you can still use existing ICSM MDB databases. Please migrate your existing MS Access format databases to Oracle, SQL Server, or SQLite format. For personal databases, the .db3 file is a good replacement for the .mdb file. For shared use (or personal use) we advise SQL Server as it is as powerful as Oracle yet simpler to administrate. If you have some custom software directly interacting with the ICSM Tables in the MDB, consider using a .MDB in which you linked the SQLite tables through ODBC. The database extract as .MDB file is still supported, however if you need to work on the extract using ICS Manager, better use the SQLite db3 format

Secțiunea 4: actualizări, modificări, corecții comunicate serviciilor din Direcția Gestiunea Spectrului

Comparativ cu ultima versiune utilizată de ANCOM, ICSM 2024.12, au fost introduse următoarele funcții, modificări și corecții, aduse la cunoștința SRMTA, SRFS, pentru a se raporta la ele în cadrul activității, și, eventual, a solicita modificări sau corecții viitoare:

7. Opțiune nouă la Tabele de alocare: La transferul benzilor dintr-un tabel în altul, există o nouă opțiune pentru eliminarea automată a benzilor preexistente care se suprapun cu benzile copiate din clipboard.
8. Opțiune nouă: Datele privind alocările UIT care reflectă WRC 2023 sunt disponibile, cu note de subsol.
9. Opțiune nouă: Suport adăugat pentru SNS V10
 - Fișierele SNS produse de ICS Manager vor fi în formatul SNS V10;
 - ICSM încă acceptă SNS V9, dar numai pentru import
 - Pentru a calcula contururile de coordonare ale stațiilor terestre folosind Gibc, trebuie instalată versiunea 10.0 a software-ului spațial ITU.
 - Pe același computer, versiunea veche de ICSM folosind SNS V9 poate coexista cu noua versiune de ICSM folosind SNS V10
10. Căutare potențiale interferențe: din Alte stații terestre, caută și în tabelul de stații terestre
11. Corectie: Stații TDAB: eroare corectată la procedura de actualizare în lot/actualizarea planului de canale. Pentru exportul sateliților, trebuie specificată baza de date Gims (Configurare/Spațiu de lucru/selecția bazei de date SNS...). Deoarece Gimapi V10 nu citește bazele de date Gims vechi, ICSM va utiliza automat gimapi V9.1 pentru extragerea conturilor de amplificare din bazele de date Gims vechi.
12. Corectie Earth Stations: Eroare corectată în calculul kTBF. La exportul în HTZ, se va aplica valoarea implicită pentru cifra de zgomot, dacă este specificată; Dacă nu există o valoare implicită pentru cifra de zgomot, aceasta va fi calculată din temperatura de zgomot și temperatura de referință = 290 K.
13. Space: Importul sateliților va utiliza Gimapi32 din software-ul ITU Space V9.1
14. Modificare: Broadcast: Tabela DVB-T station redenumita ca 'Digital TV stations'; adăugate valori 'Transmission system': T0 to U4 „to handle types other than DVB-t”
15. Nou: Suport pentru noul format BRIFIC circular >= 3042, <https://www.itu.int/ITU-R/terrasys/docs/db-changes/changes>. Bazele de date BRIFIC cu o versiune anterioară pot fi utilizate în continuare, cu excepția planului GE06: LF/MF, Fix/mobil, GE84.
16. Populate campurile fmtv_target, fxm_target, lfmf_target
17. Broadcast FM, TDAB, DVB stations: Import din fișierul de notificare ITU în tabelul de stații FM-TDAB-DVB: Erori corectate și opțiuni noi adăugate
 - Selectarea unui plan de emisie într-o stație de tip P-transmițător planificat

- Dacă se face în Actualizare Batch / Câmpuri multiple prin formular, identificarea stațiilor va fi incrementată
18. Other terrestrial/Alloted mobile/Update operator data:
- Opțiune nouă: „Import patterns to antenna table” -> fișierele MSI ale modelelor vor fi importate în tabelul de antene, iar înregistrarea antenei va fi atașată la înregistrarea stației
 - Planet file import: Tools/Antenna radiation Pattern files/Import planet - eroare remediată și acum puteți alege în ce tabel de antene să creați înregistrări noi (anterior doar tabelul Antenna Mob)
 - parsing handles FREQUENCY_BAND, CLASS, ELECTRICAL_TILT, ANTENNAT.TECH_IDNO 50->200 chars
19. Corectie la „select location to save coverage” on first attempt
- Batch Update multiple fields by form crashed ICSM
20. Handling of very big NGSO notices in SNS databases: they can also be browsed, in the following manner: in case of group table selection or one of its children (assigned frequency, emissions,..) what will be browsed is the group. In case of higher level table 9a notice, an orbit selection, what will be browsed is the entire notice, excluding all groups.
- It can be converted to HTZ Sat files;
- fixed bug orbit altitude (radius of perigee)
 - fixed bug 'SRSSatImpt.txt' cannot be deleted
21. The patterns '<two uppercase letters>|<nine digits>' (Example: 'FM|000000056') are reserved for the coordination tables;
22. The patterns '<some chars>|a', '<some chars>|b', '<some chars>|d', '<some chars>|e', '<some chars>|f>' (Example 'ST23456|a') are reserved for identifying diversity grouped links or back to back links exported as two links
23. Microwave links with back to back passive or members of a diversity group should use maximum 14 characters, because may be exported with '|a', '|b', '|d', '|e' or '|f' suffix
24. Bug fix: Edit area and save and exit - without entering into the Geography tab, GEOGRAP is erased, so X_MIN, X_MAX, Y_MIN, Y_MAX not saved. Now is corrected
25. Channel allotments not linked to any area : they are supposed to be valid everywhere, so in ALL_TXRX_FREQ the associated Geography is now Full globe
26. Other terrestrial stations: Associated geography
- If they are linked to a Position record of type Radius or polygon, they inherit the geography of the position

- Else if they are of category MOBIL or TYPIC : Their associated geography will take into account the Radius in the position tab
- Else their associated geography will be a Point (because the station can only be located at this point, any radius describes the coverage area and not the possible locations)

27. Channel allotments : Has its own Geography column

- If the channel allotment is attached to an Area, it will copy the Area geography
- If the channel allotment has a country, it will copy the corresponding IDWM Area geography (Tools/Vector/Import IDWM...)
- Otherwise, it will be FullGlobe (valid everywhere)

28. Search potential interferences is possible accross Channel allotments and other mobile tables

29. From the channel allotments form, if type 'N - not a constraint' and a channelling plan is selected, then the function Search free channels is available

30. Area selection control : more powerful, you can now select an Area or Idwm area or City record, and inflate it

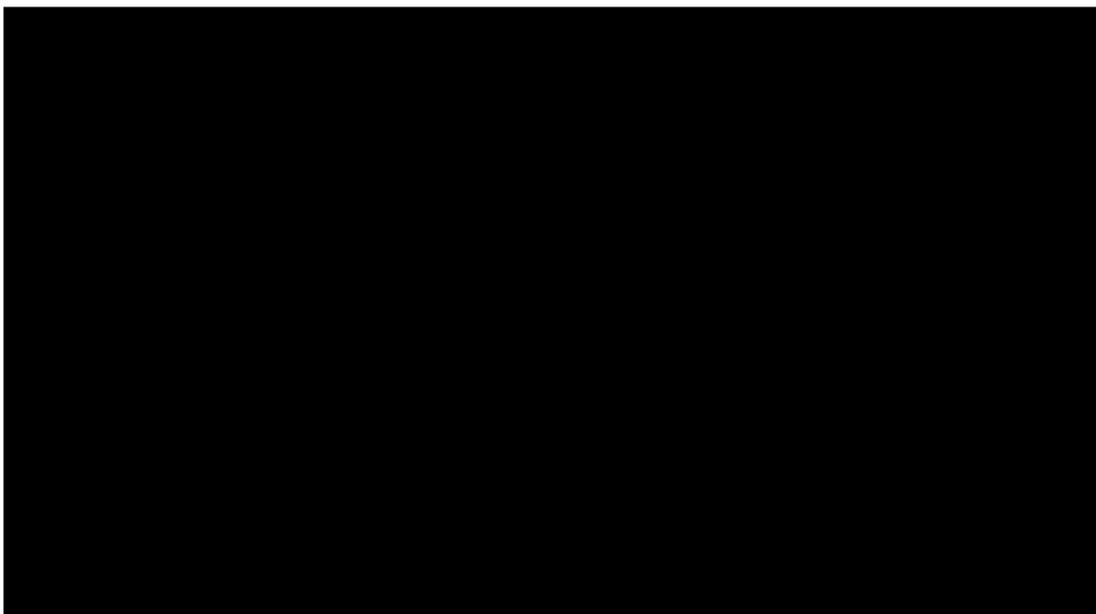
31. Network Licence, Contents tab: Now you can filter the stations

32. In the Other terrestrial stations table, the button [Search free channels] now offers two options:

- Quick search (same function as before but using allotment geographies)
- Plan local analysis uses the function Spectrum analysis/Channelling plan analysis, which is more powerful because it displays for each channel what are the existing station assignments which already use the spectrum resource.

The same two functions have been made available in the Channel allotment form

33. In the spectrum analysis functions and GeoDistance/GeoIntersects query, the possibility to inflate polygons has been added



e-DGS/1073/18.08.2025

PROCES VERBAL DE RECEPȚIE

În perioada 01.07.2025 – 31.07.2025 furnizorul ATDI S.A. a asigurat serviciile de mentenanță și suport pentru Sistemul Informatic Integrat pentru Gestiunea Spectrului Radio în conformitate cu termenii și clauzele prevăzute în Acordul e-SC 4408/20.05.2025 și în Contractul subsecvent nr. 1 e-SC 5008/10.06.2025 și au fost corespunzătoare din punct de vedere cantitativ și calitativ, reflectate în raportul furnizorului înregistrat în ANCOM cu nr. SC-16728 / 08.08.2025 aprobat, fiind în valoare de 20.000 Euro fara TVA, respectiv 24.000 Euro (inclusiv TVA).

Secțiunea 1: suportul, mentenanta HTZ Communications

1. S-au livrat și recepționat:

- update-uri functionale ale HTZ Communications versiunea V2024.6 și 7 continand functii și caracteristici noi și actualizari ale functiilor existente.

ACCOUNT DETAILS
LICENSES
CHANGE PASSWORD
GO TO DOC CENTER
GO TO MAPS

#1 HTZ communications

Application: HTZ communications
License number: 007279ANCOM_htz_com_30srpvr_090629Soft
Support until: 2029-06-10
Number of CALs: 30
Download links:

2025.7 - x64
2025.7 - x64u
i

★ For X86 releases, please contact support@atdi-group.com

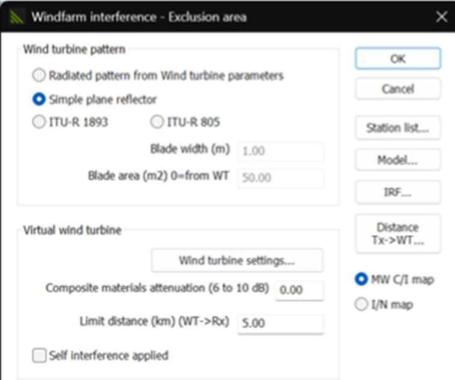
Type of license: **Server**
Valid until: **Perpetual**
Version of license: **Commercial**
Last upload: **2025-07-21**
Modification documents:

NEWS AND MODIFICATIONS

Noutatile și modificările principale sunt prezentate pe scurt in tabelul urmator.

Version	Type	Function Name and Snapshot	Domain	Description																																																												
V2025.5	MODIF	REPORT/AREA FILE/ Areas+vector polygons covered...	Interface	The points located below the polygon contour(s) area now considered in the analyses.																																																												
		 <p>Surface and Population covered - Vector polygons</p> <p>Thresholds (dBm/Hz)</p> <p>1st threshold: 52 2nd threshold: 60 3rd threshold: 70</p> <p>Site by site analysis <input checked="" type="checkbox"/> On map composite coverage <input type="checkbox"/></p> <p>Load... Save...</p> <table border="1"> <thead> <tr> <th>Population</th> <th>Outlier area</th> <th>Population %</th> <th>Outlier area</th> <th>Population %</th> </tr> </thead> <tbody> <tr> <td>open</td> <td>5</td> <td>rail</td> <td>0</td> <td><input checked="" type="radio"/> linear distribution</td> </tr> <tr> <td>village</td> <td>10</td> <td>road</td> <td>0</td> <td><input type="radio"/> Outlier distribution</td> </tr> <tr> <td>suburban</td> <td>15</td> <td>airport</td> <td>0</td> <td></td> </tr> <tr> <td>urban</td> <td>20</td> <td>farmland</td> <td>0</td> <td></td> </tr> <tr> <td>dense urban</td> <td>25</td> <td>rural</td> <td>0</td> <td></td> </tr> <tr> <td>forest</td> <td>0</td> <td>br-plaster</td> <td>0</td> <td></td> </tr> <tr> <td>hydro</td> <td>0</td> <td>br-brick</td> <td>0</td> <td></td> </tr> <tr> <td>high urban</td> <td>20</td> <td>br-glass</td> <td>0</td> <td></td> </tr> <tr> <td>park/wood</td> <td>0</td> <td>br-wood</td> <td>0</td> <td></td> </tr> <tr> <td>building</td> <td>0</td> <td>border</td> <td>0</td> <td></td> </tr> <tr> <td>Total %</td> <td colspan="4">100</td> </tr> </tbody> </table> <p>Compute surface and population covered limited to activated vector polygons Result by station and by NetworkID or Composite per polygon</p> <p>OK Cancel</p>	Population	Outlier area	Population %	Outlier area	Population %	open	5	rail	0	<input checked="" type="radio"/> linear distribution	village	10	road	0	<input type="radio"/> Outlier distribution	suburban	15	airport	0		urban	20	farmland	0		dense urban	25	rural	0		forest	0	br-plaster	0		hydro	0	br-brick	0		high urban	20	br-glass	0		park/wood	0	br-wood	0		building	0	border	0		Total %	100					
Population	Outlier area	Population %	Outlier area	Population %																																																												
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Total %	100																																																															
V2025.5	NEW	RADAR STATION POPUP MENU/COORDINATION/ PSR/SSR safeguarding range...	Spectrum management	This feature will display Primary or Secondary surveillance radar coordination areas. Zones number 1,2,3 and 4 for PSR and 1,2 and 4 for SSR. The calculations are computed according to the maximum radar range (user defined) and the height of the wind turbine (with AGL or ASL reference as defined in the settings). They are limited to the range of angles defined in the "Limit sector" start/end values. The specifications are coming from the document "EUROCONTROL-GUID-130 / Edition 1.2 - September 2014: How to Assess the Potential Impact of Wind Turbines Surveillance Sensors".																																																												
		 <p>Eurocontrol windturbine impact</p> <p>WT height (m): 180.00 Max Radar range (km): 30.00 Primary Radar = 1, Secondary Radar = 2</p> <p>OK Cancel</p>																																																														
V2025.6	MODIF	TOOLS/Cartographic conversion...	Interface	New geoconv DLLs have been implemented.																																																												
V2025.6	NEW	RIGHT-CLICK ON MAP/FIND/Convert coordinates...	Interface	The coordinate converter tool has been added (same as the one located in "Tools/Map calculators/Coordinate converter...").																																																												
		 <p>Coordinate converter</p> <p>Input Input code: 4JTN31 EW coordinate: 756250.0000000 NS coordinate: 2069400.0000000</p> <p>Compute >> Snap <<</p> <p>Output Output code: 4DEC EW coordinate: 5,4278848 NS coordinate: 18,7002374</p> <p>UTM zone: 31</p> <p>Web Mercator and Arcsec resolutions... Convert coordinates from file (Item_X,Y)...</p> <p>Close</p>																																																														

Version	Type	Function Name and Snapshot	Domain	Description
V2025.6	MODIF	SHORT BUTTON/EXPORT SCREEN/ Export PNG tiles + AI mask predict...	Interface	A new AI model has been implemented.
V2025.6	NEW	SPECTRUM/CONSTRAINTS/ Built-up from clearance angle...	Spectrum manager	This feature will compute areas where a structure with a given height (a building or a wind turbine for example) can be built while fulfilling the required clearance angle rule (defined by the user) around each active station on the map. More info in: http://data.atdi-group.com/doc/Clearance Analysis (Weather Radar Vs Wind Turbines).pdf .
				
V2025.6	NEW	COVERAGE/SEARCH SITES/ Search sites from polygons...	Interface	This feature will perform a site searching from the vector polygons on the map. The target area is made of the vector polygon(s) defined with the same "Info(1)" field as the one set in the "Source polygon" field. The sites will be located inside the vector polygon(s) defined with the same "Info(1)" field as the one set in the "Destination polygon" field. Please refer to the http://data.atdi-group.com/doc/808.pdf document for more details.
				
V2025.6	MODIF	RECTANGLE TOOL/Search site... POLYGON TOOL/Search site...	Interface	A new dialog box has been implemented in these features. Please refer to the http://data.atdi-group.com/doc/447.pdf document for more details.
				
V2025.6	MODIF	Move to my location	Interface	To avoid errors generated when the Windows location service is not available, a new management of the priorities has been implemented: - The coordinates retrieved by the GPS (if available) are now considered in priority 1. And if the GPS coordinates are valid, HTZ won't request Windows permissions to receive location data. - If there is no GPS connected to the computer, only the Windows location service will be used.

Version	Type	Function Name and Snapshot	Domain	Description																											
V2025.6	MODIF	TOOLS/Clutter settings	Calculations	With the dB/km model and the autoveg ("-5") option, a flat attenuation is applied considering an average value of the ITU-R P.833 coefficients (A1 (dB) and Alpha). Please refer to the http://data.atdi-group.com/doc/118.pdf document for more details.																											
V2025.7	NEW	STATION DATABASE/Export ICS-M	Spectrum management	The "Export ICS-M" feature has been added. It will export the selected stations to ICS manager. Notes: - ICS manager must have been previously open from HTZ; - If the stations are already existing in the ICS manager database, the records can be updated. Otherwise, only ITU notices (TVA, TVD, T01, ...) can be generated from the HTZ database. No new records will be created in the ICS manager database.																											
		<table border="1"> <tr> <td>Sel. highlight</td> <td>Sel. from list</td> <td>Filter...</td> </tr> <tr> <td>Duplicated CS...</td> <td>Change...</td> <td>Load TRX...</td> </tr> <tr> <td>Coverage SbS</td> <td>Overlapping</td> <td>Script</td> </tr> <tr> <td>Border</td> <td>Spectrum</td> <td>Stats</td> </tr> <tr> <td>Vectorize SbS</td> <td>Vector</td> <td>Vector Line</td> </tr> <tr> <td>Ascii Grid SbS</td> <td>Fld SbS</td> <td>CFDw/u SbS</td> </tr> <tr> <td>Move</td> <td>List</td> <td>Copy coverage</td> </tr> <tr> <td>Refresh</td> <td>Reset</td> <td>Export ICS-M</td> </tr> <tr> <td colspan="3" style="text-align: center;">Close</td> </tr> </table>	Sel. highlight	Sel. from list	Filter...	Duplicated CS...	Change...	Load TRX...	Coverage SbS	Overlapping	Script	Border	Spectrum	Stats	Vectorize SbS	Vector	Vector Line	Ascii Grid SbS	Fld SbS	CFDw/u SbS	Move	List	Copy coverage	Refresh	Reset	Export ICS-M	Close				
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Close																															
V2025.7	MODIF	STATISTICS/COVERAGE MAP/ Wind turbine exclusion area...	Spectrum management	This feature has been optimized and the C/I interference mode has been added for MW links. Please refer to http://data.atdi-group.com/doc/Wind Farm modelling with ATDI.pdf for more details.																											
		 <p>Wanted: Activated station(s) on map (multi-ox). Interferer: Virtual wind turbine on each point of the terrain Interference: On each point of the terrain, I/N map RCS=Blade RCS, Heights=Top mast+Blade and Top mast C/I map valid if activated microwave link</p>																													

De asemenea, a fost transmis catre Ancom si newsletter-ul care anunta noile functii livrate in contul de client ANCOM:



Newsletter - July 2025

From Sarah Sasson <sarah.sasson@atdi.com>
Date Fri 2025-07-25 12:30
To Virgilius Traian Stanciulescu <virgilius.stanciulescu@ancom.ro>



Dear Virgilius

Welcome to the July 2025 edition of our newsletter!

We're pleased to bring you a packed update this month, covering the latest enhancements, projects, and insights from across our work in wireless communications and beyond. Whether you're interested in the newest features within HTZ, such as our cutting-edge AI Mask Prediction tool, or want to learn how we're supporting the Port of London with advanced modelling and analysis, there's something here for everyone.

[HTZ Updates – All Updates up to v.2025.7](#)

These features are available in the latest upgrade (HTZv2025.7) and can be accessed via the CRM. If you do not have a valid maintenance contract and would like to access the latest updates, please contact your local office for more information.

CALCULATIONS

TOOLS/HF propagation

A new "*Move to my location*" function now updates the station heading (azimuth) based on GPS or system location data.

INTERFACE

REPORT/Area file

Points below the polygon contours are now included in area/vector analysis, improving the precision of coverage reports.

TOOLS/Cartographic conversion

The integration of new GeoConv DLLs enhances map format compatibility and conversion.

RIGHT-CLICK ON MAP / Convert coordinates

The coordinate converter is now accessible directly via map right-click, mirroring the functionality found under "Tools".

SHORT BUTTON / Export screen

A new AI model improves PNG tile and mask export predictions for visual outputs.

COVERAGE / Search sites

Enables polygon-based site search using "Info(1)" field logic for source and destination matching.

RECTANGLE & POLYGON TOOL / Search site

Updated with a new dialogue box to simplify site search and selection workflows.

Move to my location (Windows Service)

The priority logic has been updated to prefer GPS input; if unavailable, the system defaults to Windows location services.

SPECTRUM MANAGEMENT

RADAR STATION POPUP MENU / Coordination

Introduces PSR/SSR safeguarding zones in line with EUROCONTROL guidance for assessing wind turbine impacts on radar.

SPECTRUM / Constraints

Calculates areas where structures (e.g., wind turbines) meet clearance angle constraints around active stations.

STATION DATABASE / Export ICS-M

Allows station data export to ICS Manager for continuity between planning and licensing environments.

STATISTICS / COVERAGE MAP / Wind turbine exclusion area

Adds MW C/I interference mode to improve exclusion area assessments for wind farms.

TACTICAL RADIO COMMS (+INTERFACE)

C.E.W / JAMMING / STATIC / Jamming efficiency (J/N)

This feature introduces a new reporting function, facilitating tactical planning and analysis.

MAP LAYER UPDATES – <F4> and <F8> Shortcuts

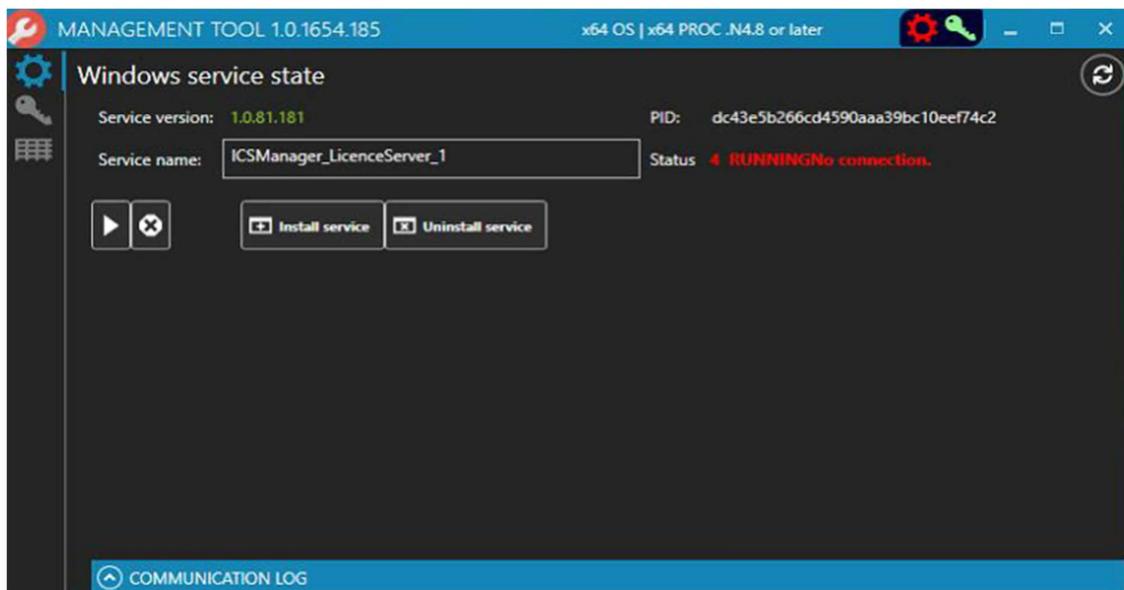
URLs for Maxar imagery have been refreshed; Bing Maps are no longer supported within Map Quad.

Secțiunea 2: suportul, mentenanța, administrarea și arhitectura sistemului

1. A fost livrat și instalat ICS MANAGER, versiunea actualizata ICSM 2025.07 atat pe mediul de PRODUCTIE cat si pe cel de TEST.



2. A fost acordat suport la solicitare pentru probleme legate de oprirea serviciului asociat License Manager cauzat de un update al Microsoft Windws Server si ocuparea spatiului pe disk. Problema a fost solutionata.



3. A fost solicitat suport referitor la „Operation mode” in tabela Earth Station. In acord cu formulele de calcul pentru tarificare pentru Earth stations, valorile pentru Operation mode trebuie sa fie **TC,TCLC,TCHB,TCCD,MLCD,MLTC,TGES,TJES, TRTK** si sunt stocate in **EARTH_STATION.OPERATION_MODE**

Astfel, in interfata, lista se actualizeaza, in functie de ESTA_Family:

Family= LCX

lovCreate(lov,"TCLC","ROM","Statie transport programe audiovizuale catre satelit");

Family= CRD

lovCreate(lov,"TC","ROM","Statie fixa (VSAT) in serviciul fix prin satelit");

lovCreate(lov,"TCHB","ROM","FXCP, Statie fixa coordonatoare de retea (hub)");

lovCreate(lov,"TCCD","ROM","Statie fixa coordonatoare de retea (hub)");

Family= VSAT

lovCreate(lov,"TC","ROM","Statie fixa (VSAT) in serviciul fix prin satelit");

lovCreate(lov,"TRTK","ROM","Statie TRTK (VSAT) in serviciul fix prin satelit");

Family= SNG

lovCreate(lov,"MLTC","ROM","Statie transportabila tip SNG in serviciul fix prin satelit");

Family= TER

lovCreate(lov,"TUFX","ROM","Statie fixa in serviciul mobil prin satelit");

lovCreate(lov,"TU","ROM","Statie mobila in serviciul mobil prin satelit");

lovCreate(lov,"TG","ROM","Statie mobila amplasata pe nave maritime sau fluviale");

lovCreate(lov,"TJ","ROM","Statie mobila amplasata la bordul aeronavelor");

Family= ESV

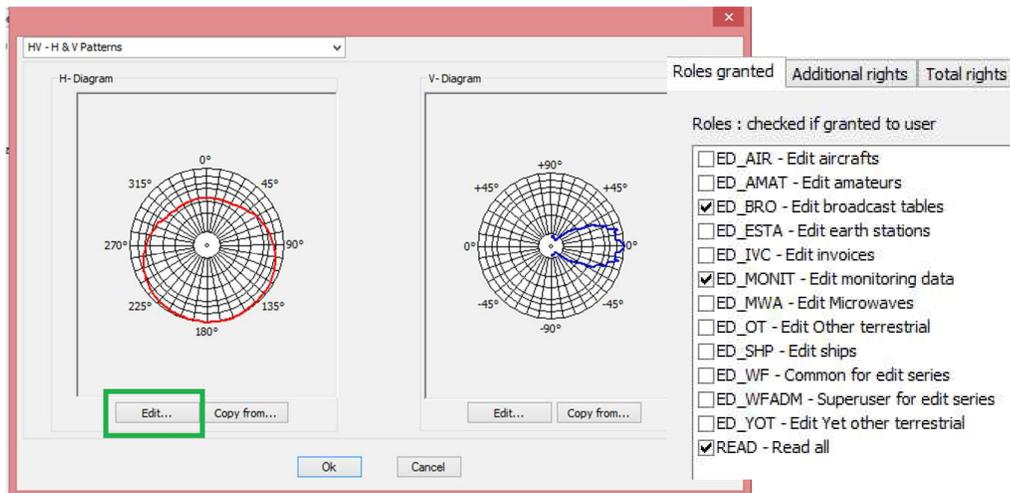
lovCreate(lov,"TGES","ROM","Statie de sol amplasata la bordul navelor");

Family= AES

lovCreate(lov,"TJES","ROM","Statie de sol amplasata la bordul aeronavelor");

Secțiunea 3: suport acordat in legatura cu activitatea Serviciului Monitorizare Spectru

4. La solicitarea SMS / DR Timis a fost modificat dreptul pentru utilizatori din grup MONITORIZARE, pentru a avea drepturi de modificare a Antenna Patterns. S-au acordat roluri suplimentare, si a fost actualizat TaskForce Members: utilizatorul a fost introdus in Taskforces 42, 43, 46, 48 (Z-T / Region T, R-WF / Data player, R-MONIT / Monitoring player, D_BCASTA / Domain BCASTA). Particularizarea a fost testata pentru utilizatorul SORINNEMET



Astfel utilizatorilor din Serviciile de Monitorizare Spectru li se vor putea acorda drepturi de modificare a pattern-urilor antenelor, in mod similar cu drepturile aferente utilizatorilor care executa activitate specifica autorizarilor

Secțiunea 4: suport acordat in legatura cu activitatea Serviciului Radiocomunicatii Mobile Terestre si Audiovizual

La solicitarea ANCOM, au fost efectuate urmatoarele modificari:

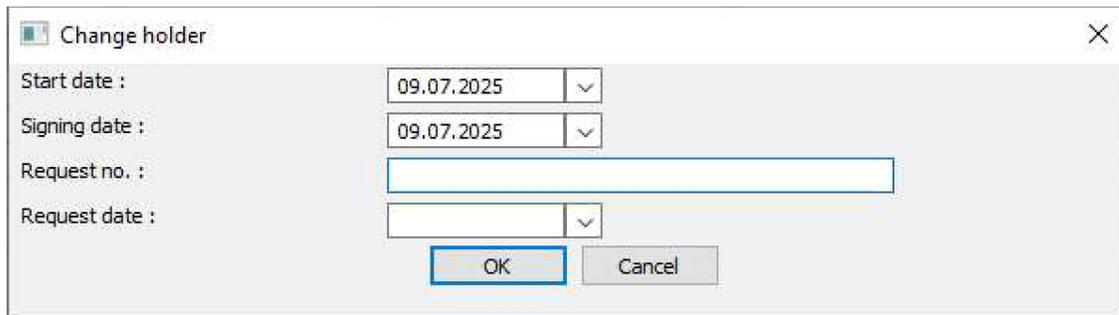
5. SRMT.REQ.25-01

La procesul “**Detach from authorization...**” (in context menu-ul pe inregistrare MOB_STATION) a fost adăugat MOB_STATION.REC_ID = NULL.

6. SRMT.REQ.25-02

La procesul “**Transfer the Licence to another holder...**” (la Process/Record Action pe inregistrarea SERV_LICENCE) au fost adăugate/actualizate următoarele câmpuri:

- Adăugat un nou câmp de tip date în dialogbox-ul procesului, ca în desenul de mai jos, pentru actualizarea câmpului SIGNING_DATE din tabellele SERV_LICENCE și LICENCE
- Deasemenea, adăugate campurile Request no. și Request date cu implementarea aferentă (similara cu cea de la Issue modification...)



The screenshot shows a dialog box titled "Change holder" with a close button (X) in the top right corner. It contains four input fields:

- Start date : 09.07.2025 (dropdown menu)
- Signing date : 09.07.2025 (dropdown menu)
- Request no. : (empty text input field)
- Request date : (dropdown menu)

At the bottom of the dialog box are two buttons: "OK" and "Cancel".

La click pe OK:

- Se va actualiza SERV_LICENCE.SIGNING_DATE = *Signing date*
- Se va actualiza SERV_LICENCE.START_DATE = *Start date*
- Se va incrementa SERV_LICENCE.MODIF_NUM
- Se va actualiza campul REC_HISTORY.EVENT_MORE corespunzator cu informatiile din Request no. și Request date

- Se va actualiza LICENCE.SIGNING_DATE = *Signing date*
- Se va actualiza LICENCE.START_DATE = *Start date*
- Se va incrementa LICENCE.MODIF_NUM
- Se va actualiza campul REC_HISTORY.EVENT_MORE corespunzator cu informatiile din Request no. și Request date

A fost eliminat SERV_LICENCE.START_DATE de la inceputul stringului in REC_HISTORY.EVENT_MORE (imaginea de mai jos) legat cu SERV_LICENCE record.

ID	Event date	Event author	Event type	Event Precision
1717460	01.08.2025	FLAVIUSBUNEA	Holder change issued	01/09/2025 RQ:005, Sign: 01.08.2025, Req: 27.07.2025/SX-yyyy
1717462	01.08.2025	FLAVIUSBUNEA	ARCHIVE	RQ:005, Sign: 01.08.2025, Req: 27.07.2025/SX-yyyy
1701639	17.09.2024	GABRIELSTANCIU	LE issued	RQ:030, Sign: 18.09.2024, Req: 19.08.2024/SC-17324

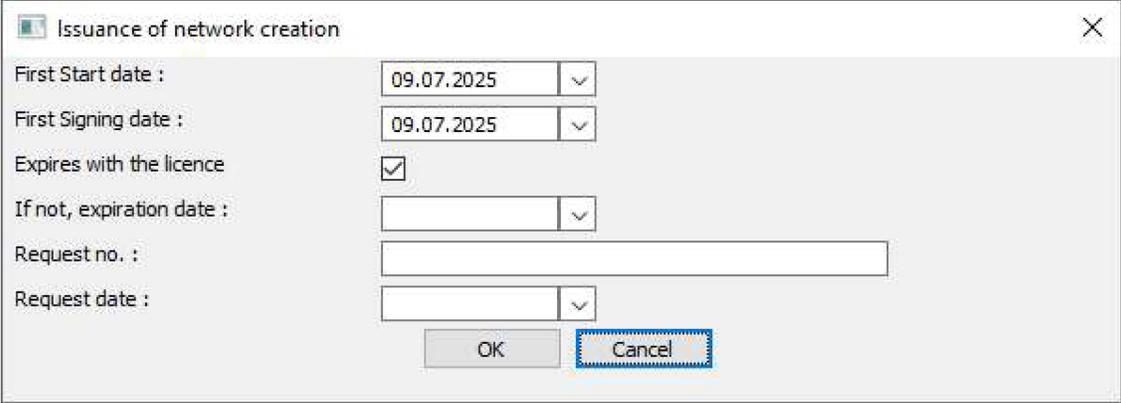
7. SRMT.REQ.25-03

La procesul **Licence Issuance...** (la Process/Record Action pe inregistrarea SERV_LICENCE) au fost făcute următoarele modificări:

- modificat caption la dialog box din "Issuance of LE" in "Licence issuance"
- modificat labelul "LE number :." in "Licence number :"
- modificat lungimea editbox-ului Request no. în concordanță cu lungimea câmpului REC_HISTORY.EVENT_MORE (255)
- Nu se va mai popula editbox-ul *expires after (months)* cu valoarea implicită (6 luni) pentru SERV_LICENCE.CUST_TXT4='OCZ'.

8. SRMT.REQ.25-04

La procesul **Issue initial authorization...** (Process/Record Action pe inregistrarea LICENCE) au fost făcute următoarele modificări:



- Se modifică caption la dialog box din "Issuance of network creation" în "Authorization issuance"
- Se modifică lungimea editbox-ului (nr. de caractere acceptate) **Request no.** în concordanță cu lungimea câmpului REC_HISTORY.EVENT_MORE (255 chars).

9. SRMT.REQ.25-05

Sunt cazuri rare în care, la prelungire, se solicită și modificări tehnice în autorizație (modificare de amplasament, modificare de putere, adaugare de stații fixe abonat).

La procesul **Prolong the licence...** (Process/Record Action pe inregistrarea SERV_LICENCE), au fost adaugate următoarele setări în rutina procesului:

- For each LICENCE.STATUS='M' -> Update LICENCE.STATUS='E'
- For each MOB_STATION.STATUS='sSTU' -> Update
MOB_STATION.STATUS='sACC'

Niciodată nu se vor updata staturile 'sX_R', 'sX_E', 'sX_C', 'sX_T' în 'sACC'!

Singurul status (MOB_STATION.STATUS) care se va modifica la apelarea **Prolong the licence...** este statusul 'sSTU' în 'sACC'

Se vor updata statusurile MOB_STATION.ST_FAMILY în concordanță cu MOB_STATION.STATUS

La adaugarea de statii noi (la prelungire), se vor popula datele asa cum este prezentat mai jos, pentru fiecare statie adaugata:

MOB_STATION.BIUSE_DATE= LICENCE.START_DATE

MOB_STATION.EOUSE_DATE=LICENCE.STOP_DATE

MOBSTA_FREQS.BIUSE_DATE= LICENCE.START_DATE

MOBSTA_FREQS.EOUSE_DATE=LICENCE.STOP_DATE

10. SRMT.REQ.25-06

In tab-ul **Queries** din Headers (Coordination Requests – HCM Mobile) WIEN_HEADREQ_MOB și

In In tab-ul **Queries** din Headers (Coordination Answers – HCM Mobile) WIEN_HEADANS_MOB

Rescalat corect dimensiunile butonului **Refresh**

11. SRMT.REQ.25-07

Dacă se face click pe oricare din înregistrările WIEN_ANS_MOB (1) (tab-ul Queries) sau se editează una din înregistrările WIEN_ANS_MOB, cand se face apoi click pe butonul **Save** (2) din dialogboxul aferent inregistrarilor **WIEN_HEADREQ_MOB** sau **WIEN_HEADANS_MOB**, ICSM se blocheaza

Dacă se face click pe **Save and exit** (3) totul este ok!

A fost rezolvata aceasta problema

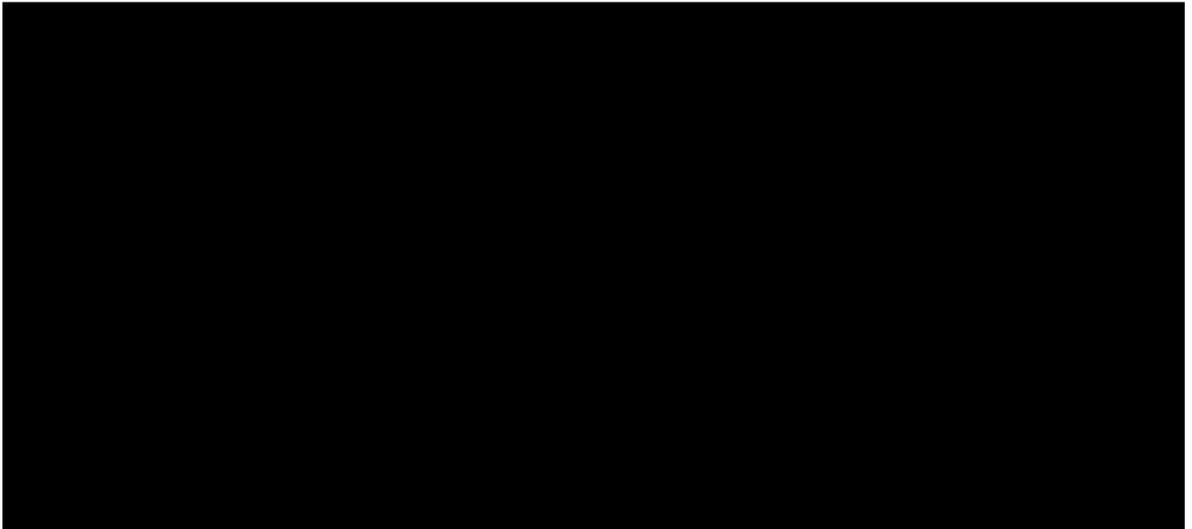
The screenshot displays the [HNG] Header REQ application interface. The main window shows a table with columns: ID, From..., To..., Writing date, Code, File number, Reference Origin, Path of the coordination file, Reference Destination, NbRecords, ANCOM In/Out Reg. No., and ANCOM. The table contains several rows of data, with the first row highlighted in blue. A dialog box titled "Headers (Coordination Requests - HCM Mobile) n°299" is open, showing a table with columns: ID, 13X, Coord..., From..., To..., I., Date (Req), I., 13Z. The dialog box has a "Refresh" button. An error message dialog box is also visible, stating "Error" and "Stack allocation error;". At the bottom of the dialog box, there are buttons for "Save and exit", "Cancel and exit", and "Save changes".

12. SRMT.REQ.25-08

La procesul **Issue modification...** (Process/Record Action pe inregistrarea din tabela LICENCE) nu se mai updatează statusurile stațiilor MOB_STATION.STATUS 'sX_C', 'sX_R', 'sX_E', 'sX_T' în 'sACC'!

Singurul status care se va updata la apelarea procesului **Issue modification...** este statusul 'sSTU' în 'sACC'!

Se vor updata statusurile MOB_STATION.ST_FAMILY în concordanță cu MOB_STATION.STATUS!



ADVANCED TOPOGRAPHIC DEVELOPMENT

FR46 3000 2004 3200 0000 7963 T69

-86.184,00 RON

Titular	AUTORITATEA NATIONALA PENTRU ADMI NISTRARE SI REGLEMENTARE IN COMUN
Cod IBAN	RO43RNCB0082044181470001
Cod BIC sau SWIFT	RNCBROBUXXX
Partener	ADVANCED TOPOGRAPHIC DEVELOPMENT
Cod IBAN	FR4630002004320000007963T69
Cod BIC sau SWIFT	CRLYFRPPXXX
Info	INVOICE 25070022/16.07.2025 TECHINC AL SUPPORT AND MAINTENANCE 10-30.06 .2025
Referinta beneficiar	INVOICE 25070022/16.07.2025 TECHINC AL SUPPORT AND MAINTENANCE 10-30.06 .2025
Data decontarii	18.08.2025
Data valutei	19.08.2025
Suma schimbata	16.800,00 EUR
Referinta	250818SF11143590

Tranzacția a fost înregistrată. Acest document este valabil fara semnatura sau stampila bancii.

Tiparit la: 19.08.2025

Valuta/Ccy	Suma/Amount
E U R X	1 6 8 0 0 , 0 0

1. Beneficiar / Beneficiary
 Numele beneficiarului / Beneficiary's name
 ADVANCED TOPOGRAPHIC DEVELOPMENT&IMAGES
 Adresa completă(stradă, oraș, țară)/ Full address (street, town, country)
 11, BOULEVARD MALESHERBES FR 75008 PARIS

2. Banca beneficiarului / Beneficiary's bank
 IBAN beneficiar / Beneficiary's IBAN
 F R 4 6 3 0 0 0 2 0 0 4 3 2 0 0 0 0 0 0 7 9 6 3 T 6 9
 Cont beneficiar / Beneficiary's account
 Numele bancii beneficiarului / Beneficiary's bank name
 C R E D I T L Y O N N A I S P A R I S V I L L I E R S
 Adresa completă(stradă, oraș, țară)/ Full address (street, town, country)
 C L P A R I S V I L L I E R S 0 0 4 3 8
 Cod țară Country code F R
 BIC bancă beneficiar / Beneficiary's bank BIC
 C R L Y F R P P

3. Detalii de plată / Details of payment
 INVOICE 25070022/16.07.2025
 TECHNICAL SUPPORT AND MAINTENANCE 10-30.06.2025

4. Plătitor / Payer
 Numele plătitorului / Payer's name
 A N C O M
 Adresa completă(stradă, oraș, țară)/ Full address (street, town, country)
 D E L E A N O U A 2 S E C T O R 3 B U C U R E S T I
 Cod de identificare fiscală / Payer's tax code
 X 1 4 7 5 1 2 3 7
 IBAN plătitor / Payer's IBAN
 R O 4 3 R N C B 0 0 8 2 0 4 4 1 8 1 4 7 0 0 0 1 x X x
 BIC bancă plătitoare / Payer's bank BIC
 R N C B R O B U

5. Detalii ordin de plată / Payment order details
 Data emiterii / Issuing date 1 8 0 8 2 0 2 5
 Comisioane / Charges X SHA OUR BEN
 Urgent / Urgent X X X X X X X X

Prin semnarea acestui document, certific că am luat la cunostință de conținutul informațiilor de pe verso
By signing this document, I certify that I am aware of the information existing on the back-side.

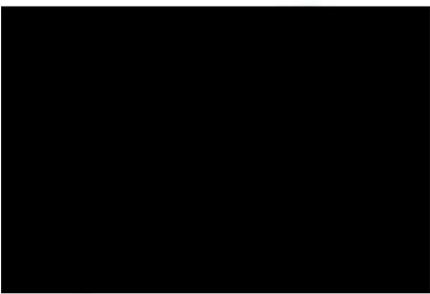
Numerar /	Cec /
Cash	Cheque
Acreditiv /	Incasso /
Letter of credit	Collection

Semnături persoane autorizate / authorized persons signatures

Semnături persoane autorizate / authorized persons signatures

Ștampila /Stamp

Ștampila plătitorului /Payer's stamp



ADVANCED TOPOGRAPHIC DEVELOPMENT

FR46 3000 2004 3200 0000 7963 T69

-123.432,00 RON

Titular AUTORITATEA NATIONALA PENTRU ADMI NISTRARE SI REGLEMENTARE
IN COMUN

Cod IBAN RO43RNCB0082044181470001

Cod BIC sau SWIFT RNCBROBUXXX

Partener ADVANCED TOPOGRAPHIC DEVELOPMENT

Cod IBAN FR4630002004320000007963T69

Cod BIC sau SWIFT CRLYFRPPXXX

Info INVOICE 25070034/31.07.2025 TECHNIC AL SUPPORT AND
MAINTENANCE 01.07-31 .07.2025

Referinta beneficiar INVOICE 25070034/31.07.2025 TECHNIC AL SUPPORT AND
MAINTENANCE 01.07-31 .07.2025

Data decontarii 29.08.2025

Data valutei 01.09.2025

Suma schimbata 24.000,00 EUR

Referinta 250829SF11207130

*Tranzacția a fost înregistrată. Acest document este valabil fara semnatura sau
stampila bancii.*

Tiparit la: 01.09.2025

Valuta/Ccy	Suma/Amount
E U R X	2 4 0 0 0 , 0 0

1. Beneficiar / Beneficiary

Numele beneficiarului / Beneficiary's name

ADVANCED TOPOGRAPHIC DEVELOPMENT&IMAGES

Adresa completă(stradă, oraș, țară)/ Full address (street, town, country)

11, BOULEVARD MALESHERBES FR 75008 PARIS

2. Banca beneficiarului / Beneficiary's bank

IBAN beneficiar / Beneficiary's IBAN

F R 4 6 3 0 0 0 2 0 0 4 3 2 0 0 0 0 0 0 7 9 6 3 T 6 9

Cont beneficiar / Beneficiary's account

Numele bancii beneficiarului / Beneficiary's bank name

C R E D I T L Y O N N A I S P A R I S V I L L I E R S

Adresa completă(stradă, oraș, țară)/ Full address (street, town, country)

C L P A R I S V I L L I E R S 0 0 4 3 8

Cod țară

Country code

F R

BIC bancă beneficiar / Beneficiary's bank BIC

C R L Y F R P P

3. Detalii de plata / Details of payment

INVOICE 25070034/31.07.2025

TECHNICAL SUPPORT AND MAINTENANCE 01.07-31.07.2025

4. Plătitor / Payer

Numele plătitorului / Payer's name

A N C O M

Adresa completă(stradă, oraș, țară)/ Full address (street, town, country)

D E L E A N O U A 2 S E C T O R 3 B U C U R E S T I

Cod de identificare fiscală / Payer's tax code

R O M A N I A X 1 4 7 5 1 2 3 7

IBAN plătitor / Payer's IBAN

R O 4 3 R N C B 0 0 8 2 0 4 4 1 8 1 4 7 0 0 0 1 x X x R N C B R O B U

BIC bancă plătitoare / Payer's bank BIC

5. Detalii ordin de plată / Payment order details

Data emiterii / Issuing date

2 9 0 8 2 0 2 5

Comisioane / Charges

X SHA OUR BEN

Urgent / Urgent

X X X X X X X X X

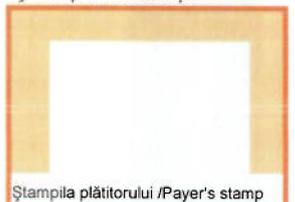
Prin semnarea acestui document, certific că am luat la cunoștință de conținutul informațiilor de pe verso
By signing this document, I certify that I am aware of the information existing on the back-side.

Semnături persoane autorizate / authorized persons signatures



Semnături persoane autorizate / authorized persons signatures

Ștampila /Stamp



Ștampila plătitorului /Payer's stamp

Numerar /	Cec /
Cash	Cheque
Acreditiv /	Incasso /
Letter of credit	Collection



=====
===== ORDIN DE PLATA Nr. 448T PLATITI 2.856
LEI, Adica

----- douamioptsutecincizecisisaselei

----- PLATITOR: ANCOM Cod de identificare
fiscala: 14751237 Adresa: DELEA NOUA 2 SECTOR 3 Cod IBAN platitor:
RO43RNCB0082044181470001 Codul BIC: RNCBROBU De la: BANCA COMERCIALA
ROMANA Angajament cod/ indicator.: / Cod program:

----- BENEFICIAR: ANCOM Cod de identificare
fiscala: 14751237 Cod IBAN platitor: RO55TREZ23F850100200109X Codul BIC:
TREZROBU La: TREZORERIA STATULUI Nr.de evidenta a platii:
Reprezentand:TRANSFER SUMA NEUTILIZATA SCH VALUTAR PT PLATA F
25070022/16.07.2025

| Primirea/ Acceptarea Data emiterii: 20/08/2025 | Data debitarii: |
| Semnatura Semnatura platitorului si Stampila |
| Tipul transferului NORMAL URGENT
|

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===== (1)

=====
===== ORDIN DE PLATA Nr. 448T PLATITI 2.856 LEI, Adica

----- douamioptsutecincizecisisaselei

----- PLATITOR: ANCOM Cod de identificare
fiscala: 14751237 Adresa: DELEA NOUA 2 SECTOR 3 Cod IBAN platitor:
RO43RNCB0082044181470001 Codul BIC: RNCBROBU De la: BANCA COMERCIALA
ROMANA Angajament cod/ indicator.: / Cod program:

----- BENEFICIAR: ANCOM Cod de identificare
fiscala: 14751237 Cod IBAN platitor: RO55TREZ23F850100200109X Codul BIC:
TREZROBU La: TREZORERIA STATULUI Nr.de evidenta a platii:
Reprezentand:TRANSFER SUMA NEUTILIZATA SCH VALUTAR PT PLATA F
25070022/16.07.2025

| Primirea/ Acceptarea Data emiterii: 20/08/2025 | Data debitarii: |
| Semnatura Semnatura platitorului si Stampila |
| Tipul transferului NORMAL URGENT
|

=====
===== (1)

ORDIN DE PLATA

Nr.

591C

PLATITI

3.768

LEI, adică

treimiisaptesutesasezecisioptlei

PLATITOR

ANCOM

Cod de identificare fiscală

14751237

Adresa

DELEA NOUA 2 SECTOR 3

Cod IBAN

plătitor

RO43RNCB0082044181470001

Codul BIC

RNCBROBU

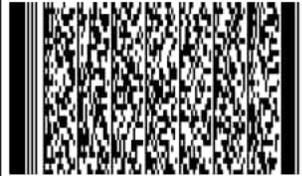
De la

BANCA COMERCIALA ROMANA

Angajament : Cod

Indicator

Cod program



Primirea/ Acceptarea

L. S.

Semnătura

BENEFICIAR

ANCOM

Cod de identificare fiscală

14751237

Codul BIC

Cod IBAN

beneficiar

RO55TREZ23F850100200109X

TREZROBU

La

TREZORERIA STATULUI

Nr. de evidență a plății

pt. Decizie de impunere/ PV

Reprezentând :

TRANS SUMA NEUTILIZ DIN REF 250829SF11207130 F 25070034 31 07 25
ATDI

Tipul transferului

NORMAL

URGENT

Data emiterii

02/09/2025

L. S.

Semnătura plătitorului si Stampila

EXP.

Data debitării

v. 2025

(16)

Tip Entitate Entitate Publica Alte Entitati Persoana Fizica

**ORDIN DE PLATA MULTIPLU ELECTRONIC
(OPME)**

Suma control

Numar document

Data document

Nr.inregistrari

Total Document LEI LEI ADICA optzecisinouamiipatruzecilei.00bani

Denumire Platitor

CIF platitor

Adresa platitor

PLATITOR

BENEFICIAR

NR. OP.	Cod IBAN platitor	Denumire Trezorerie	Cod Program	Cod Angajament	Indicator Angaj.	Denumire Beneficiar	Cif/CNP Beneficiar	Cod IBAN beneficiar	Denumire Banca / Trezorerie	Suma	Numar de evidenta a platii	Reprezentand	
590C	RO55TREZ23F850100200109X	TREZORERIA STATULUI	0000000000	AABBAGH949E	AAB	ANCOM	14751237	RO43RNCB0082044181470001	BCR	89.040,00		TRANSFER PENTRU PLATA F 25070022 16 07 25 PVR e DGS 960 29 07 25 ATDI	X

VALIDARE SI GENERARE XML

Semnatura 1

Semnatura 2

FISIERELE CARE SE IMPORTA TREBUIE SA AIBA TERMINATIA .XML, SA FI FOST GENERATE DIN VERSIUNI ANTERIOARE ALE ACESTUI FORMULAR SAU SA FI FOST GENERATE DIN APLICATIILE BENEFICIARULUI, CU RESPECTAREA INTOCMAI A STRUCTURII DIN GHIDUL UTILIZATORULUI.

NERESPECTAREA ACESTOR INSTRUCIUNI VA PROVOCA O FUNCTIONARE DEFECTUOASA A FORMULARULUI.

ATENTIE!!! Debitarea contului se va realiza in functie de data si ora la care se depune documentul si se primeste prima notificare din partea sistemului prin care se confirma corectitudinea formala a documentului.

Export XML

Import XML

Tip Entitate Entitate Publica Alte Entitati Persoana Fizica

**ORDIN DE PLATA MULTIPLU ELECTRONIC
(OPME)**

Suma control

Numar document

Data document

Nr.inregistrari

Total Document LEI LEI ADICA unasutacincizecisiunumiidouasutedouazecisisaselei .96bani

Denumire Platitor

CIF platitor

Adresa platitor

PLATITOR

BENEFICIAR

NR. OP.	Cod IBAN platitor	Denumire Trezorerie	Cod Program	Cod Angajament	Indicator Angaj.	Denumire Beneficiar	Cif/CNP Beneficiar	Cod IBAN beneficiar	Denumire Banca / Trezorerie	Suma	Numar de evidenta a platii	Reprezentand	
461T	RO55TREZ23F850100200109X	TREZORERIA STATULUI	0000000000	AABBAGH949E	AAB	ANCOM	14751237	RO13TREZ700500550X017218	TREZORERIA MUNICIPIULUI BUCURESTI	127.200,00		TRANSFER PT PLATA F 25070034 31072025 PVR eDGS 1073 18082025 eSC 5008	X
													X

VALIDARE SI GENERARE XML

Semnatura 1

Semnatura 2

FISIERELE CARE SE IMPORTA TREBUIE SA AIBA TERMINATIA .XML, SA FI FOST GENERATE DIN VERSIUNI ANTERIOARE ALE ACESTUI FORMULAR SAU SA FI FOST GENERATE DIN APLICATIILE BENEFICIARULUI, CU RESPECTAREA INTOCMAI A STRUCTURII DIN GHIDUL UTILIZATORULUI.

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