

# ATDI

FOR OVER THREE DECADES, ATDI HAS WORKED IN PARTNERSHIP WITH NATIONAL AND REGIONAL SPECTRUM REGULATORS. WE CONTINUE TO DEVELOP OUR SOLUTIONS TO ENSURE THEY ADAPT TO TECHNOLOGY CHANGE, USER AND LEGAL REQUIREMENTS. OUR STRENGTH IS OUR IN-DEPTH UNDERSTANDING OF THE REGULATORY ENVIRONMENT.

OUR EXPERIENCED TEAM ENSURE PROJECTS ARE DELIVERED ON TIME AND MEET THE END-USERS EXACTING REQUIREMENTS.

ATDI WORKS CLOSELY WITH STAKEHOLDERS TO UNDERSTAND THEIR REQUIREMENTS AND TAILORS THEIR SOLUTIONS FOR BOTH LARGE AND SMALL SYSTEMS.

OUR AUTOMATED SPECTRUM MANAGEMENT SOLUTION MANAGES EVERY ASPECT OF THE SPECTRUM LIFECYCLE. THE SYSTEM COVERS SPECTRUM MANAGEMENT AND MONITORING AND EVERYTHING IN BETWEEN. FEATURES INCLUDE:

- Co-existence studies;
- EMC management for H&S;
- Advanced reporting capabilities for data handling and production of reports;
- White space device allocations to manage white space spectrum;
- Dynamic spectrum allocations for a flexible approach to spectrum management;
- Technology evaluations and business modelling to support business cases;
- Identify candidate sites for network rollout and to support expansion plans;
- Automatic network planning and optimisation to improve network performance;
- Integrate spectrum monitoring with leading third-party vendors;
- Enabling network proving;
- Data sharing for internal and external stakeholders;
- Spectrum allocation and coordination;
- Integration of data sources;
- Implementation of ITU notices to ensure compliance.

E-MAIL: [CONTACT@ATDI.COM](mailto:CONTACT@ATDI.COM)

WEBSITE: [WWW.ATDI.COM](http://WWW.ATDI.COM)

ATDI SA (Headquarters)  
11 boulevard Malesherbes  
75008 Paris, FRANCE  
T. +33 1 53 30 81 41

ATDI South Pacific  
12a, 33 Waterloo Road  
Macquarie Park NSW 2113, Australia  
T. +61 2 9889 7306

ATDI  
Paseo de Recoletos, 7  
28004 Madrid, Spain  
T. +34 986 045 050

ATDI Inc.  
1251 Avenue of the Americas  
New York, NY 10020, USA  
T: +1 202 683 08 83  
M: +1 571 215 2430

ATDI Sp. z o.o  
Nowy Świat 54/56  
00-363 Warsaw, Poland  
T. +48 22 828 92 08

ATDI  
Im Trutz Frankfurt 55  
60486 Frankfurt, Germany  
T. +49 173 271 6212

ATDI Ltd  
11 Old Jewry London  
United Kingdom EC2R 8DU  
T. +44 1444 715547

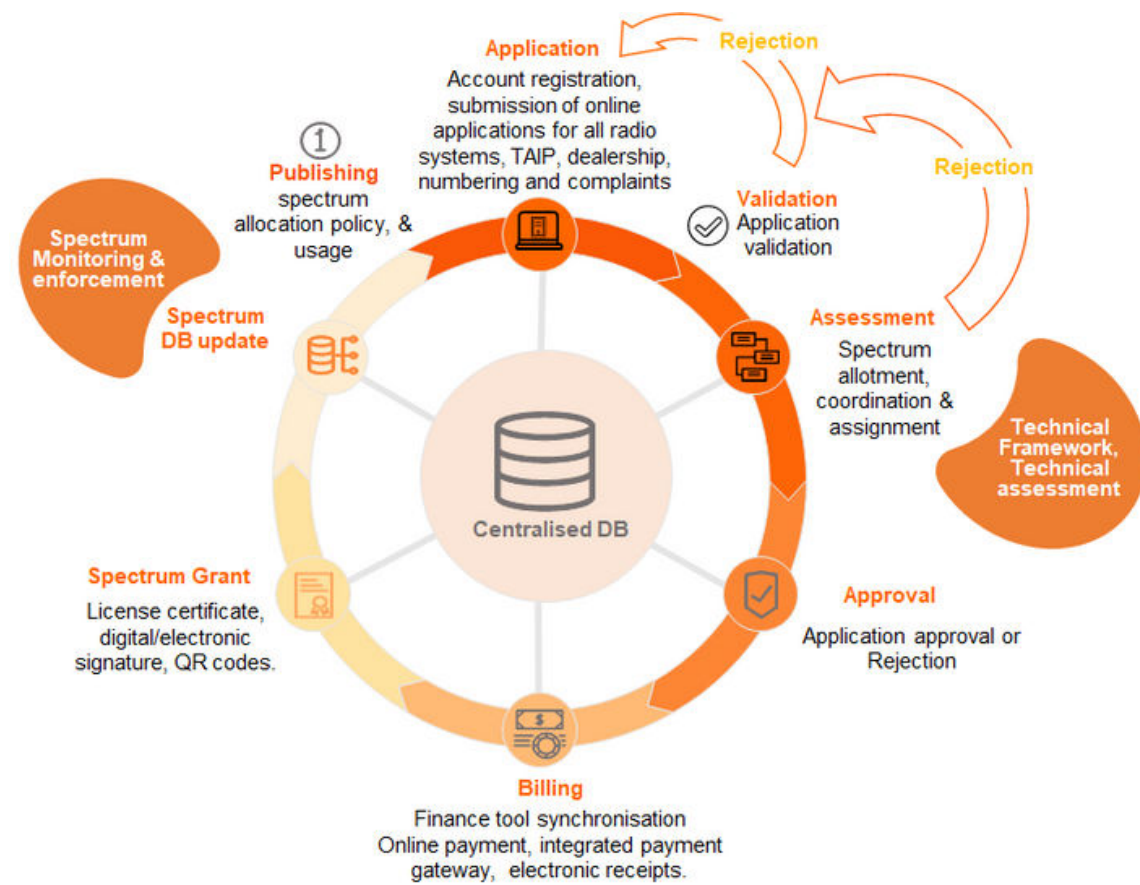
ATDI LLC  
Hmyri Borysa st., 9V, of. 211  
02137 Kiev, Ukraine  
T. +380 44 225 28 72

# AUTOMATED SPECTRUM MANAGEMENT

A COMPLETE SOFTWARE SOLUTION  
FOR THE ENTIRE SPECTRUM REGULATION LIFECYCLE







## AUTOMATED SPECTRUM MANAGEMENT SOLUTION

Radio spectrum is the lifeblood of the radiocommunications industry. It's the allotted frequencies or spectrum which supports all wireless communications.

In recent years, the need for automated spectrum management solutions has increased. These solutions integrate key regulatory functions like spectrum licensing, engineering analysis, administration and monitoring. They are proven to improve spectrum allocation, coordination, and management, and reduce the risk of human error across the process.

ATDI has been at the forefront of developing automated spectrum management solutions for over three decades.

Our automated spectrum management solution manages every aspect of the spectrum lifecycle. The system covers spectrum management and monitoring and everything in between.

- PROVIDES FLEXIBLE AND USER FRIENDLY WEB-SERVICE PORTALS (INTERNAL & EXTERNAL)
- INTEGRATES WITH THE 3RD PARTY APPLICATIONS FOR BILLING, PAYMENT AND FINANCE
- GUARANTEES ACCESS AND EFFICIENT USE OF SPECTRUM;
- MINIMISES THE IMPACT OF INTERFERENCE;
- AUTOMATES FREQUENCY ALLOCATIONS;
- SUPPORTS EMERGING TECHNOLOGIES;
- ENABLES CROSS-BORDER COORDINATION;
- SUPPORTS BACK-OFFICE FUNCTIONS;
- ENABLES DATA EXCHANGES FOR FRONT AND BACK-OFFICE SERVICES;
- INTERFACES WITH MONITORING SOLUTIONS;
- ENABLES SPECTRUM RE-FARMING AND AUCTIONS.

ESTABLISHING A FRAMEWORK TO COORDINATE NATIONAL, REGIONAL AND CROSS-BORDER INTERFERENCE

## HTZ COMMUNICATIONS & HTZ WARFARE

A key component of an automated spectrum management solution is the technical analysis of the spectrum. The solution lets the regulator understand where the spectrum can be used without causing undue interference. These technical analysis tools allow engineers to model spectrum bands to establish parameters to protect users from both in-band and out of band interference. It also supports frequency sharing and spectrum re-farming. HTZ removes the risks associated with the densely populated spectrum bands by allowing regulators to model real-life scenarios to identify potential issues before the allocation is made.

MANAGING APPLICATIONS & WORK PROCESSES INC: SPECTRUM > DEALERS > TYPE APPROVAL > IMPORT PERMITS > NUMBERING

## ICS E-MANAGER

This flexible front-end solution allows spectrum users to consult the ICS Manager database to make license applications. Workflows allow the regulator to review and approve applications, ensuring their technical compliance before they are issued. ICS e-Manager is fully customisable, allowing users to adapt the solution to meet their internal processes and automate workflows. It supports every aspect of the regulator's role, including complaint management, type approval, managing dealership licenses, import permissions, numbering and amateur radio license requests.

Spectrum Regulatory Policy & Framework

License & assignment management

MANAGING COMPLAINTS ENFORCING & REGULATING ILLEGAL EMISSIONS

Spectrum Monitoring & enforcement

Database management & Control

MAINTAINING & CONTROLLING CENTRALISED DATABASE INC: RADIO SYSTEM ASSETS > USERS > SPECTRUM ALLOCATIONS > SPECTRUM MONITORING

## ICS MONITORING-SDRN CONTROL

ICS Monitoring is used to assess spectrum use, monitor emissions and regulate the control of license emissions. It performs tasks in accordance with the radio license regulations and verifies compliance with the frequency allocation conditions, frequency use and channel occupancy. ICS Monitoring can be used to generate interference case studies and search for unauthorised emissions. It features a fully integrated license equipment database for an easy project setup. Measurement results are automatically stored for analysis without interrupting live measurement campaigns.

## ICS MANAGER

ICS Manager integrates and automates the everyday functions of spectrum regulators. Its powerful database engine enables complex workflows to be automated, so reducing user interactions and improving the overall efficiency. The solution can integrate into a single platform as part of an existing system or work in standalone mode. This scalable solution features an evolutionary spectrum management database structure that reduces user interaction times through workflow management and has a disciplined approach to data management.