

WHITE-SPACE DEVICE CALCULATION AND DATABASE

www.atdi.com

ATDI announces new White-space features in ICS suite

Since 1999, ATDI supports coexistence scenarios in [ICS telecom](#) (3.5 GHz band, Teledesic and Skybridge projects...). Now, ICS suite allows you to process the complete workflow and publish the data Online.

WHITE-SPACE FEATURES

DTT white-space calculation
TVWS availability calculation
White-space device database
Online access

Backoffice and Online services

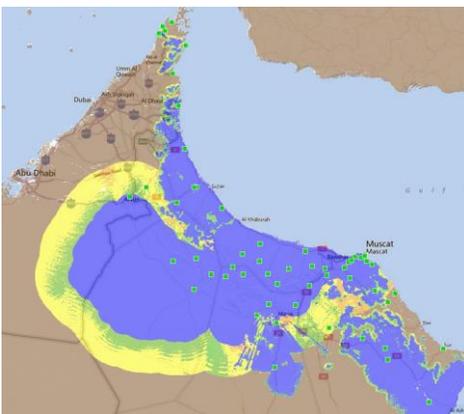
White-spaces are managed both locally and in the Cloud thanks to ICS Manager

Back office:

- . DTT protected area calculation
- . WSD availability map calculation
- . Interference WSDs vs WSDs and WSDs vs DTT
- . Import TVWSD availability maps and tiling
- . Web service validations
- . WSD checking
- . Statistics
- . Status of data in the Cloud

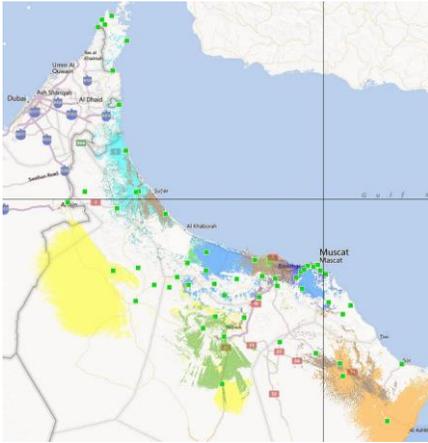
Cloud service:

- . Map tiles (TVWS availability - WMTS server)
- . Web services to communicate with WSD (location, QoS, Traffic)
- . WSD database
- . Application form



TVWS availability map – Oman C39 – Class 5

TV White Spaces (TVWS) are vacant frequencies made available for unlicensed use at locations where spectrum is not being used by licensed services. This band is currently used by Digital Terrestrial Television (DTT) and Program Making and Special Events (PMSE) users.



Protected DTT area map C39

Contact us

ATDI

contact@atdi.com

www.atdi.com

WSD VS DTT

Large choice of propagation models (outdoor, indoor, mixed outdoor/indoor, Full 3D)

- . Multiple resolution maps (from 0.01 m to 1000 m)
- . White-space devices: Class 1, 2, 3, 4, 5 – Type A, B...
- . Rejection: ETSI EN 301 598 or user defined
- . Household distribution and filter
- . WSD distribution
- . ATPC
- . Bandwidth ratio
- . User defined C/I required and NFD matrices
- . DTT white-space maps
- . TVWS availability maps (C/I, permitted power levels)
- . WSD interference (WSDs vs DTT receivers and DTT transmitters vs WSDs)
- . Spurious emissions
- . Interference analysis: Multiple scenarios
- . Rx antenna discrimination (ITU-R 419, OET69, User defined) (DTT receivers)
- . Automatic DTT selection (up to N+- 15)
- . Foreign DTT transmitters are taken into account (BRIFIC online access)
- . Offline and Online Worldwide database (Location, Channels, Power levels, WSD classes)
- . WSD location by coordinates or addresses
- . Export WMAS (Google map, Bing Map, OSM), EPSG:4326...
- . Web services.

UKPM INPUTS

UKPM files (from 0.01 m to 100 m resolution)

- . LTE vs DTT
- . WSD vs DTT
- . Multiple log-normal signal calculator (Schwartz & Yeh / Fenton-Wilkinson)
- . UKPM household automatic update
- . Up to 100 000 interferers (base stations) by DTT channel
- . Up to 2 000 000 interferers (WSDs) by DTT channels

EXPORT DATA

- . Matrices (form 0.01 m to 1000 m resolution), XML, SQL, SQL Azure, SHP, WKT, Google Earth

MORE

<http://www.atdi.com/white-space-device-calculation-and-database/>

