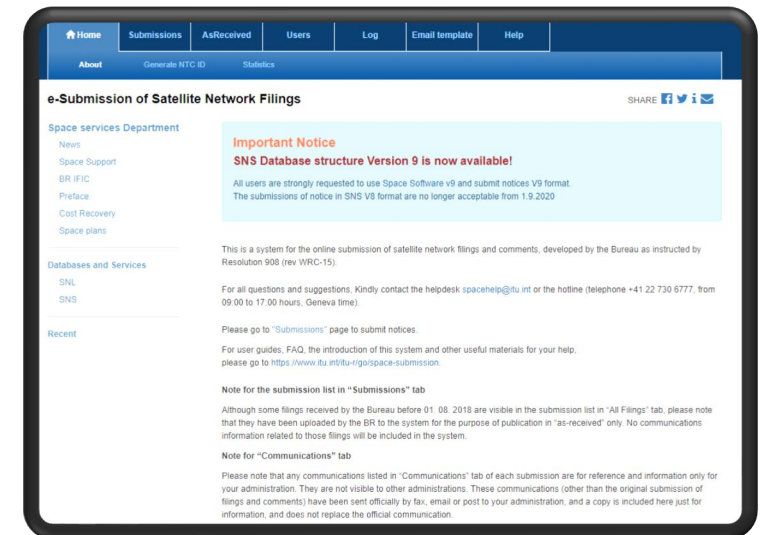# Report on Resolutions 907 and 908
- Current status and future work

Space Services Department,
Radiocommunication Bureau
ITU

e-Submission (top page)

Background

- Resolution **908** (Rev.WRC-15)

  - *resolves* that <u>administrations shall submit all satellite network filings and comments, if required, using a secure paperless electronic approach</u> upon being advised that the means for such electronic submission of a satellite network filing for satellite networks or systems has been implemented and upon receiving assurances that such means are indeed secure,

  - *instructs* the Director of the Radiocommunication Bureau <u>to implement a secure paperless electronic approach for the electronic submission and publication of satellite network filings and comments</u>, if required, for satellite networks or systems, taking into account the conditions mentioned in the resolves of this Resolution;

- To meet the *resolves* and *instructs* of Res **908** (Rev.WRC-15), the Bureau has been developing online applications implementing a consolidated approach for the electronic submission, processing and publication of all satellite network notices and comments.

  - To assist in development and testing under Res 908, the Administration of Japan made a financial contribution to the Res 908 project and made available a space regulatory expert in Geneva.

Implementation

In the development under Res **908** (Rev.WRC-15), **"e-Submission of Satellite Network Filings"** was developed as a web-based secure paperless online system for Administrations and satellite operating agencies to submit all satellite network filings and SpaceCom comment files to the Bureau.

The online submissions from Administrations to the Bureau through the e-Submission system became mandatory as of **1 August 2018,** and 100 % of online submissions of notices and SpaceCom comments has been achieved.

The online system was extended to cover the implementation of **e-Communications** for an online communication platform for the exchange of administrative correspondence related to space services, in response to **Res 907** (Rev. WRC-15) and *instructs 2* in **Res 908** (*a consolidated approach for the electronic submission of both satellite network filings and their related correspondence*).

The following pages show the status of the implementation of the various tasks of the project as submitted to the Radiocommunication Advisory Group in 2017 (reference: Revision 1 to Document RAG17/1-E)

Current status of Res 908 project

#	Task Name	Status	Remarks
1	Development and implementation of "As-received" and API publication system in response to revised API procedure and revised Res 55	**Completed**	**"As-received"** publication system was implemented for all notices required to be published "as-received" in accordance with Res **55** (Rev. WRC-15). This includes: *Coordination Request, Notification of space station, submissions received § 4.1.3 or § 4.2.6 of Article 4 of Appendices 30 and 30A, submissions received under Article 2A of Appendices 30 and 30A and submissions received under § 6.1 and § 7.2 of Appendix 30B* Also, "As-received" for API and notifications of earth station and radio astronomy station was made available from the initial implementation. Additionally, "As-received" of the following provisions became made available later according to the adoption at WRC-19 and the convenience for Administrations: Due diligence information on Res **49/552**, Resubmissions of notification under No. **11.46**, submissions under Res **35**, and comments for API for submissions under Res **32** (No.**9.3.1**). In terms of **API publication system**, the online publication for the API/C generated from Coordination Request has been implemented.

"As-Received" website

Current status of Res 908 project

#	Task Name	Status	Remarks
2	Development of system for online upload of filings	**Completed**	The "**e-Submission of Satellite Network Filings**" was developed for online uploading of all filings under Articles **9** and **11**, Appendices **30**, **30A, 30B** and Resolutions **49** (Rev.WRC-15) and **552** (Rev.WRC-15) in application of the procedures of the Radio Regulations, or their comments to a BR IFIC. The system was released in **August 2018**. The e-Submission system has been developed so far for automatic acknowledgement email, timestamps including the exact date of the event, validations and virus scan of uploaded files, allowing withdrawals of submitted filings, interface improvements including query, sorting and exporting functions, changes related to the additional data items required by the revised Appendix **4**(Rev. WRC-19) and the updates in SNS database structure from v8 to v9. Also the online communication platform, "**e-Communications**" system was developed for administrative correspondence related to space services between Administrations and the Bureau, as well as between Administrations. The system was released in **October 2019**.

Numbers of registered users and administrations on e-Submission and e-Communications

(# of users)

(# of ADMs)

Legend:
- # of users in e-Submission (left axis)
- # of users in e-Communications(left axis)
- # of Administrations in e-Submission (right axis)
- # of Administrations in e-Communications (right axis)

845 (left axis)
152
144
465

e-Communications was released officially in October 2019

e-Submission was released in August 2018

As of 05 April 2022
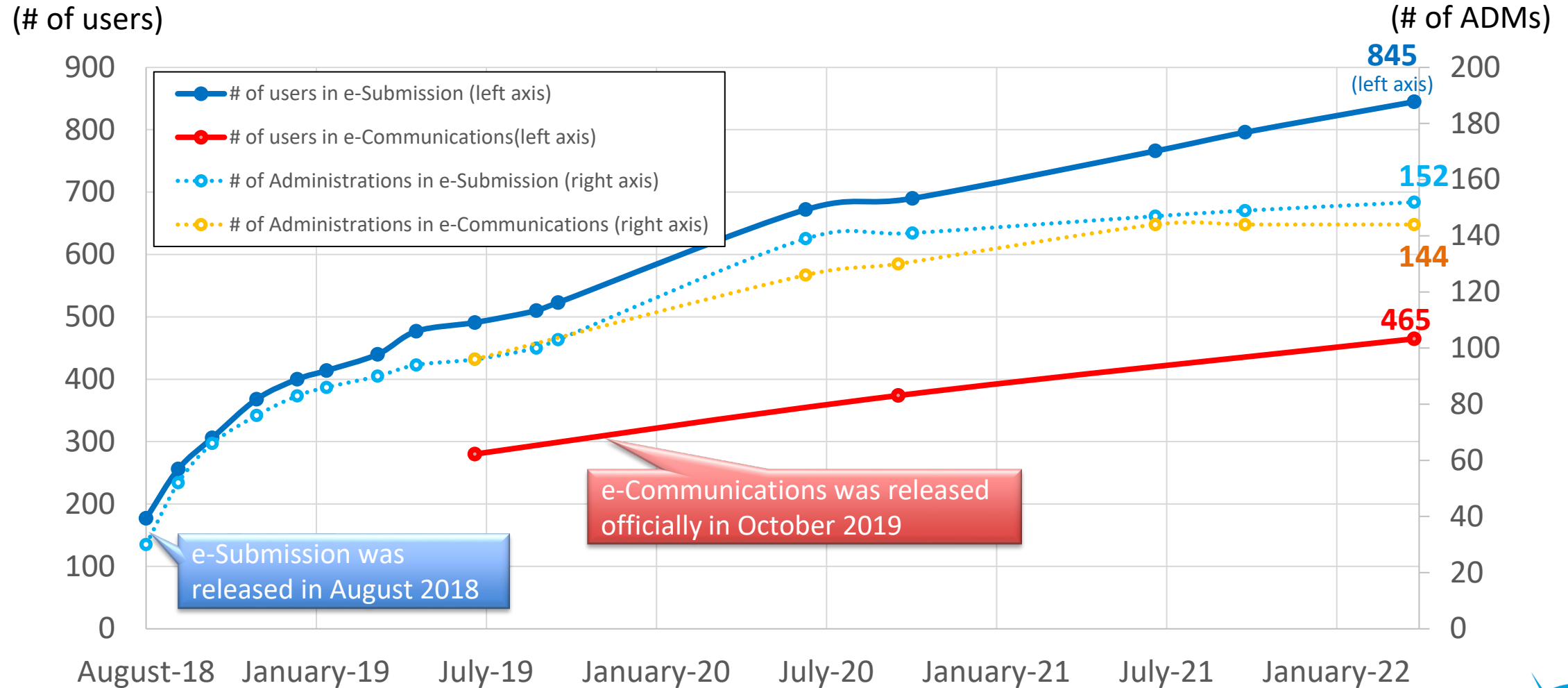
17,737 submissions received since 1 August 2018 via e-Submission
48,272 correspondences communicated since 23 October 2019 via e-Communications

Current status of Res 908 project

#	Task Name	Status	Remarks
3	System Design	**Completed**	BR web applications development follows known best practices in web development. The design and architecture of an application such as e-Submission are constantly evolving to meet increased user demand. To be able to rapidly respond to requests for new features, the BR has developed its own web framework (**AppFramework**) and its own **User Management** mechanism. These are used for the development of web applications of e-Submission, Online Capture/Edit of filings on Res **35**, and e-Communications systems. **[AppFramework]** AppFramework implements several crucially important features for successful front-end application development and incorporates best industry-wide practices applied in modern JavaScript frameworks. **[User Management]** In order to improve User Management and make it work across applications in a more flexible, secure, and stable manner, User Management was built on AppFramework (UI) and Web API (server-side) so that it can be attached to any web application as well used as a standalone application. User Management uses the Membership module system to improve security. For instance, a user inside one membership module cannot gain access to any other membership module.

Current status of Res 908 project

#	Task Name	Status	Remarks
4	Revision of Publication Process	**Completed**	Special Sections API/C and Res **35** have been published online as required under the Radio Regulations.
5	Revisions to SNS processing of notices	**Partially completed**	Preliminary process for filings from e-Submission has been achieved. Further work will be needed to improve.
6	Development of User self service portal	**Partially completed**	User management function was implemented in e-Submission and e-Communications. Further enhancement in User management is under development.

Current status of Res 908 project

#	Task Name	Status	Remarks
7	Extension of system to online Capture/Edit of filings	**Partially completed**	Res **35**: Completed Res **40**: Ongoing Res **49/552**, other notices : subject to available funding
8	Development of Receivability processing tools	**Partially completed**	The Receivability processing tools were developed to generate simple reports to facilitate internal processing. Further improvements are continuously ongoing. Furthermore, the integration between e-Communications and e-Submission for managing correspondence relating to receivability is currently at initial stage of development.
9	Development of Management Information System	**Ongoing**	This system is for BR internal management and still at an initial stage of development.
10	Development of system for Online Comments	**Ongoing**	The requirement for "e-Comment" for online commenting was drafted and is being updated. The project will commence once funding is secured.
11	Update of SNS online	**Ongoing**	"Space Explorer" is being developed as an update of SNS online

Current status of Res 908 project

#	Task Name	Status	Remarks
12	Development of Examination Tools	**Ongoing**	Initial requirements are being prepared to make some examination tools (e.g. for PFD and AP7) available for users to check their submissions online, prior to their submission to the Bureau. In addition, an online tool for verification against table Frequency Allocation for users to check their submissions online, prior to their submission to the Bureau, will be developed <u>if there is availability of funding</u>.
13	Revision of BRIFIC online	**Ongoing**	This is currently being developed.
14	Monitoring of operation, maintenance and provision of user support	**Ongoing**	BR is monitoring operations of e-Submission and e-Communications constantly and implemented some measures to secure the smooth operation, smooth communications and submissions on the systems. BR has also established available Help desk services to assist users encountering difficulties with these online systems. Systems are regularly updated. Users are well informed in advance of any system downtime due to the installation of updates.
15, 16	Development of tools for Regulatory checks 11.44 and for maintenance of MIFR	**Not yet**	These tasks are for internal processing

Future work

- The e-Submission and e-Communications systems have been successfully implemented and have been operating securely and continuously without any critical failures since the introductions on 01.08.2018 and 23.10.2019 respectively.

- e-Submission has been used for all submissions of notices and e-Communications are used by most Administrations. The number of users for both systems is increasing more and more.

- Further work is still ongoing on many tasks that were envisaged in 2017.

- Further updates are ongoing on e-Submission and e-Communications systems according to the requests from Administrations.

- Several major modules may require additional funding in order to deliver new tools, taking into account the current development resources.

- In view of the current budget limitations, the Bureau would like to call for voluntary contributions to fund the additional work.