



# ANALYSIS OF THE EXPERIMENTAL LICENSES OF THE FEDERAL COMMUNICATIONS COMMISSION (FCC)

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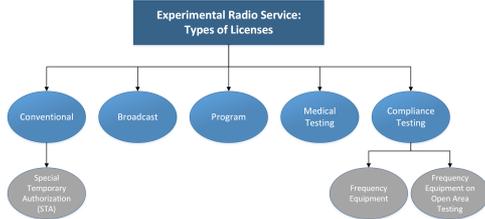
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## Comprehensive analysis of the details pertaining to the assignment of experimental licenses (FCC) during the past ten years.

### Research Framework

#### Types of Licenses:



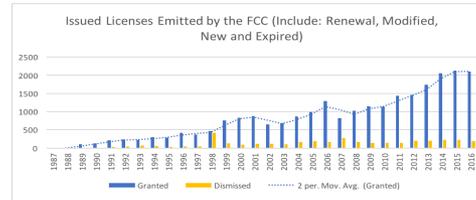
**Technical Limitations:** The rules provide great flexibility: allowable frequency range, transmitted irradiated power, and emission.

**License Period:** Very flexible aspect: Conventional, up to 5 years. STA, expected to last no more than six months.

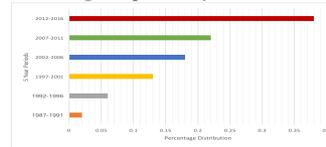
**Scraping:** No API available. Individual queries presented in HTML. Consequently, scraping interface is necessary

### Evolution of Licenses

- From less than 500 to more than 2000 licenses per year.

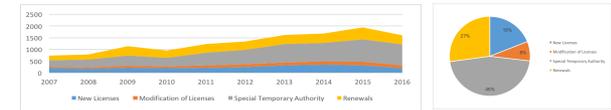


- 61% issued during the past 10 years.

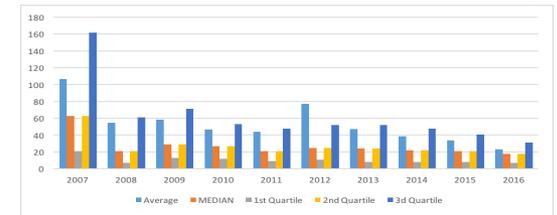


### General Assignment Process

- Number of issued licenses by type (2007-2016):



- Average processing time has been reduced from over 100 days, from 2007 to 2009, to less than 40 days in the past

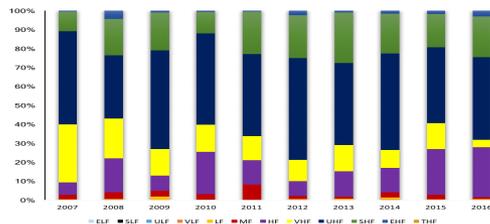


### Conventional Licenses

- 89 between 1 and 24 months
- 86% corporations, 3% individuals and 2% partnerships



- 74,932 frequencies assigned (almost every band).
- Bands with the higher number: UHF and SHF.



### Special Temporary Authorizations

- Most for less than a month (47%). Moreover, for less than 3 days: 10%, or less than a week: 52%.



- Most authorized for the coverage and support of televised events (73%):



### Conclusions and Future Work

- The number licenses has more than doubled during this period from **less than 1000 (2007) to almost 2000 (2015)**.
- The delays associated with the licensing process have **decreased from 160 days to 40 days in average**.
- Wide range of applications: **great flexibility in authorized frequencies and transmission power levels**.
- Our future work comprises:
- A **deeper technical analysis** of the features of the licenses.
- Differentiate between delays **regarding FCC and NTIA**, when both entities are involved in the licensing process.
- Compare the delays and other relevant metrics to those obtained for **similar licenses in other countries**.
- Evaluate the **impact of these licenses in spectrum sharing**.

The original document can be downloaded from:

