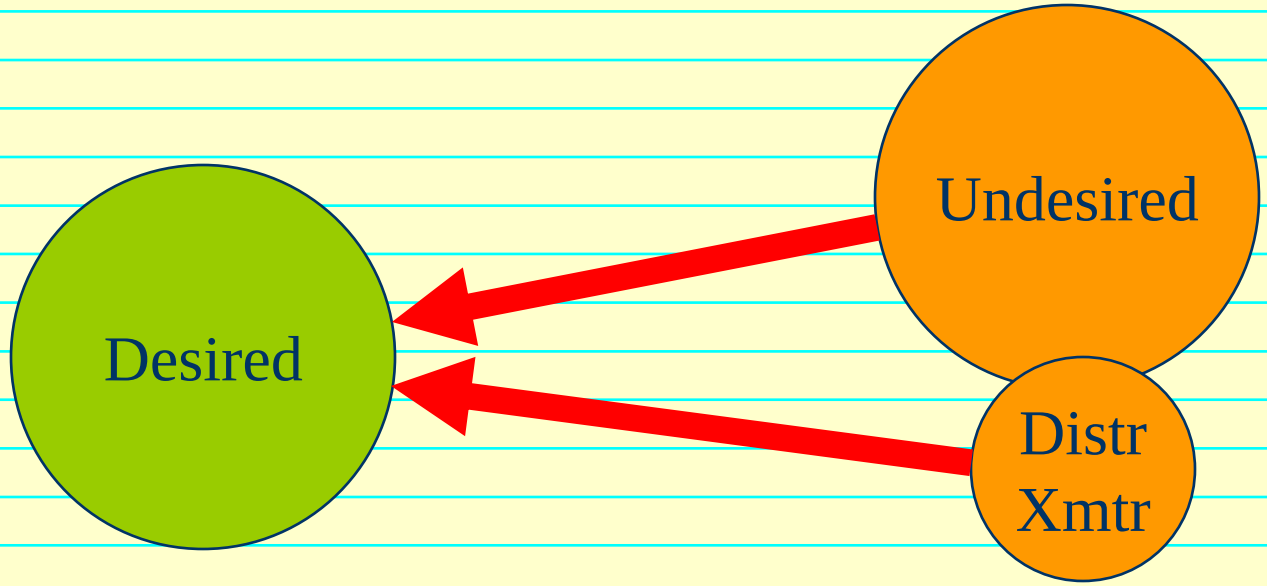
Interference Analysis Methods

- ✓ Based on Current Techniques
  - ✓ Longley-Rice Propagation Model
  - ✓ OET Bulletin 69
  - ✓ *de minimis* Interference Thresholds
    - ✓ Embodied in the Rules – Whatever They May Become
- ✓ Must Protect Neighbors from DTx Systems
  - ✓ All Transmitters Taken Together
- ✓ Must Protect DTx Systems from Neighbors
  - ✓ Must Avoid Double Counting
- ✓ Modification of Current Software

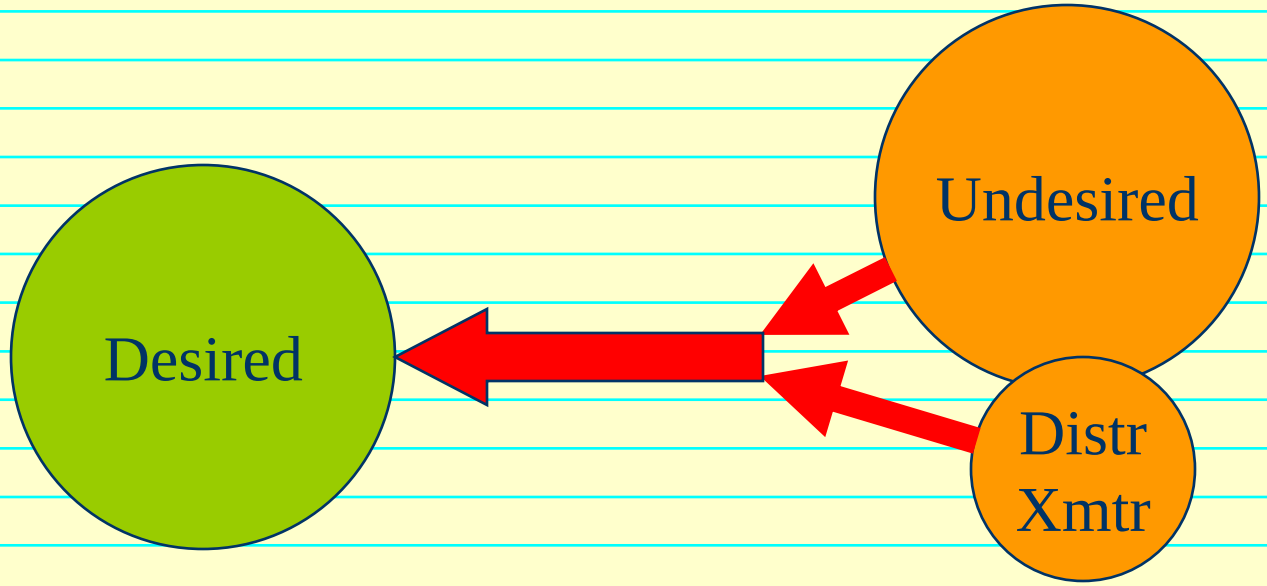
Interference FROM DTx System

- ✓ Current Interference Analysis Method
  - ✓ Main & Distr Xmtrs Treated Separately



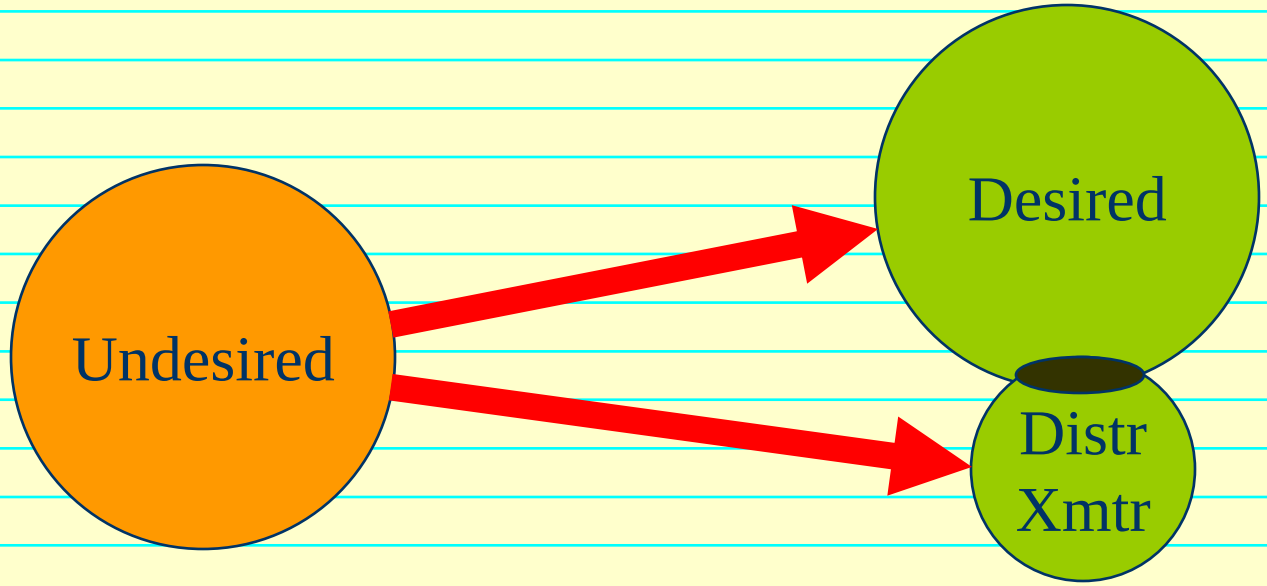
Interference FROM DTx System

- ✓ Proposed Interference Analysis Method
  - ✓ Main & Distr Xmtr Signals Aggregated



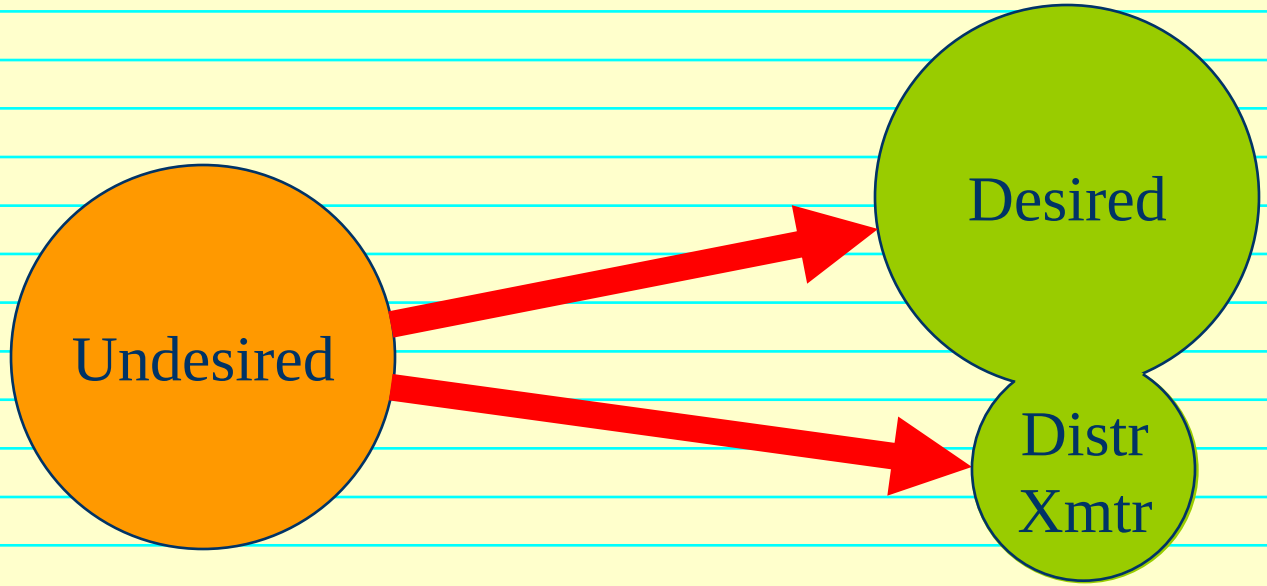
Interference TO DTx System

- ✓ Independent Interference Analysis Method
  - ✓ Overlap Leads to Double-Counting



Interference TO DTx System

- ✓ Proposed Interference Analysis Method
  - ✓ No Double-Counting



Software Modifications

- ✓ Interference FROM DTx System
  - ✓ Main & Distributed Xmtrs Analyzed Together
  - ✓ Can Be Done Manually — Turn On/Off Together
    - ✓ Method Used for Application Now On File with FCC
  - ✓ Link Distr Xmtrs to Main for Automated Analysis
- ✓ Interference TO DTx System
  - ✓ Treat Main & Distr Xmtrs As Single Service Area
  - ✓ Generate Analysis "Cells" from Single Reference Point
  - ✓ Analyze D/U Ratios Using Highest Signal Level as "D"
  - ✓ If D/U Below Threshold, Count Population from Cell
    - ✓ Avoids Double-Counting Population Losses to Interference