Dynamic Spectrum Management

*It will probably work*

------

*Lessons learned raising teenagers and working in spectrum policy.*

Prepared for

Interference Protection Criteria Session

11th ANNUAL INTERNATIONAL SYMPOSIUM ON ADVANCED RADIO TECHNOLOGIES
ISART – Spectrum Sharing Technologies

July 28, 2010
IEEE Std 1900.2 provides the framework

The next step is risk/benefit optimized decision making

A technical talk in colloquial language.
If you build it...

...right!!

They will come
Not everyone drives a sedan.

Roads should be build for motorcycles and 18-wheelers.
One Size Does Not Fit All
Because accidents happen....

...there should be airbags!!
Because some people cannot read....

...does not mean we shouldn’t post signs!!
There should be school zones and warnings around playgrounds.
Predicting the Future

or at least future transmitter behavior
Field Performance is What Matters

Most of our efforts are developing individual components of a conformity assurance system intended to deliver reliable performance in the field.
Six Pillars of Conformity Assurance

- Standardization
- Metrology
- Accreditation
- Conformity Assessment
- Performance Monitoring
- Corrective Actions
Summary

Setting the Service Rules for a Band
• Proposals for new service rules, should be evaluated based on quantified risks and benefits.

• A band should support a range of applications, allowing devices to implement the level of reliability appropriate for its application.

• Fail-safe modes need an increased presence to deal with worst-case scenarios.

• Intelligent communication is need to protect special situations.

• In the end field performance is what matters. The entire conformity assurance system must be matured.