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Semister 4th

(Q). What is internet draft?

Internet draft is a series of working documents published by the IETF. Typically drafts of RFCs but may be due to pending work not intended for publication as RFCs Drafts version of documents are made available for informal review and comment by placing them in the IETFs internet drafts directory during the readily available to a wide audience facilitating the process of review and revision. internet drafts have no formal status and are subject to change or removal at any time therefore they should not be cited or quoted in any formal document

b) What are the differences between a proposed standard, Draft standard and standard ?

Proposed Standard :

1- The entry-level maturity for the standard track is Proposed standard. A specific action by the IESG is required to move a specification onto the standard track at the Proposed standard level.

2- A proposed standard specification is generally stable, has resolved known design choices, has received significant community review, is believed to be well understood and appears to enjoy enough community interest to be considered valuable.

3- Further experience might Result in a change or even retraction of the specification before it advances.

4- It is desirable to implement them in order to gain experience and to validate.

Draft standard :-

1- A specification from which at least two independent and interoperable implements from different code bases have been developed and for which sufficient successful operational experience has been obtained may be elevated to the Draft Standard level.

2- A draft standard must be well-understood and known to be quite stable both in its semantics and as a basis for developing an implementation.

3. The requirement for at least two independent and interoperable implements applies to all of the option and features of the specification. In cases in which one or more option or features have not been demonstrated in at least two interoperable implements, the specification may advance to the draft standard level only if those options.

Standard :-

1- A specification for which significant implementation and successful operational experience has been obtained may be elevated to the internet standard level.

2- An internet standard is characterized by a high degree of technical maturity and by a generally held belief that the specified protocol or services significant benefit to the internet community.

3- All specification unconditionally accepted

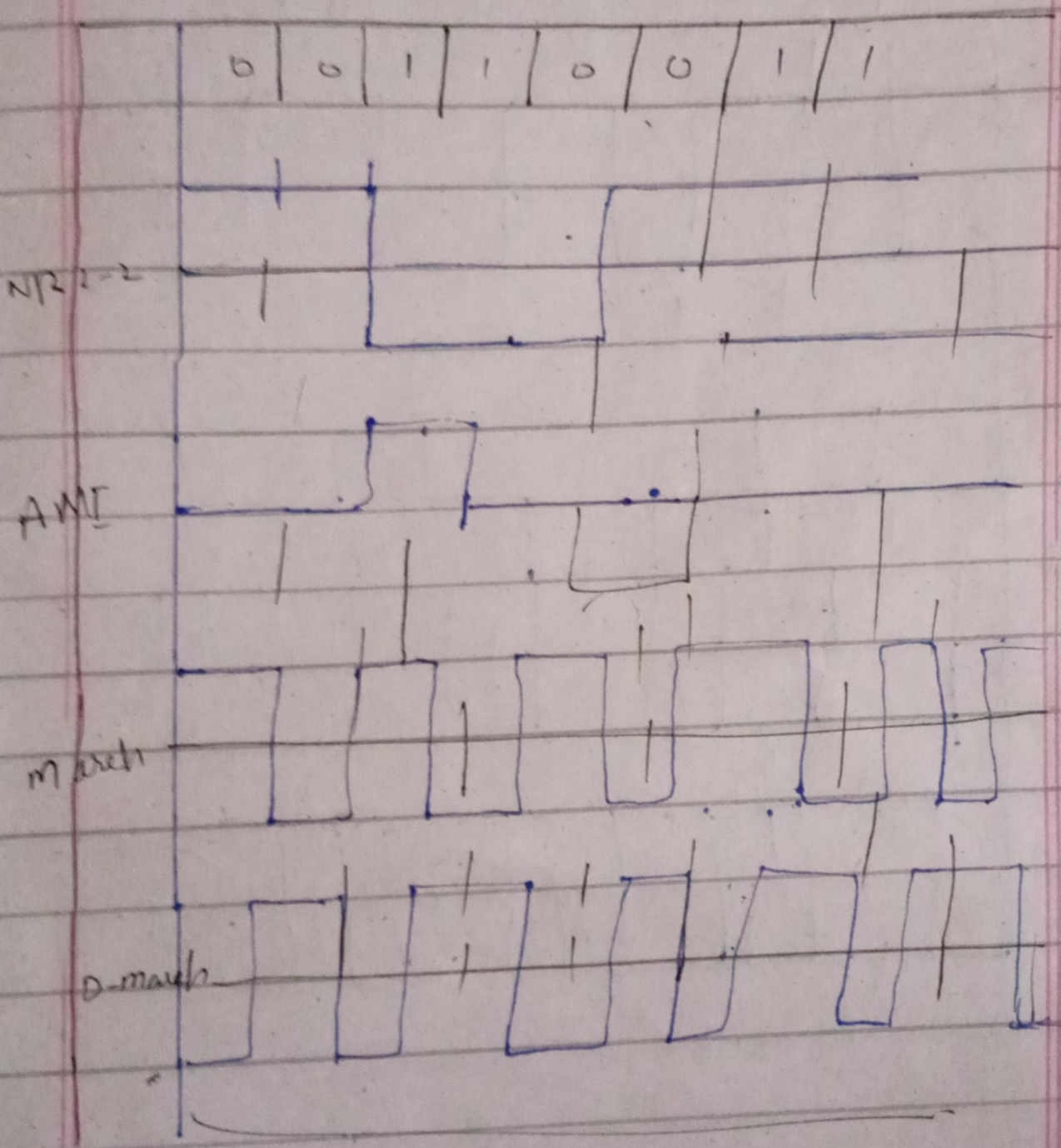
4- Has cleared requirements of both proposed and drafts and beyond

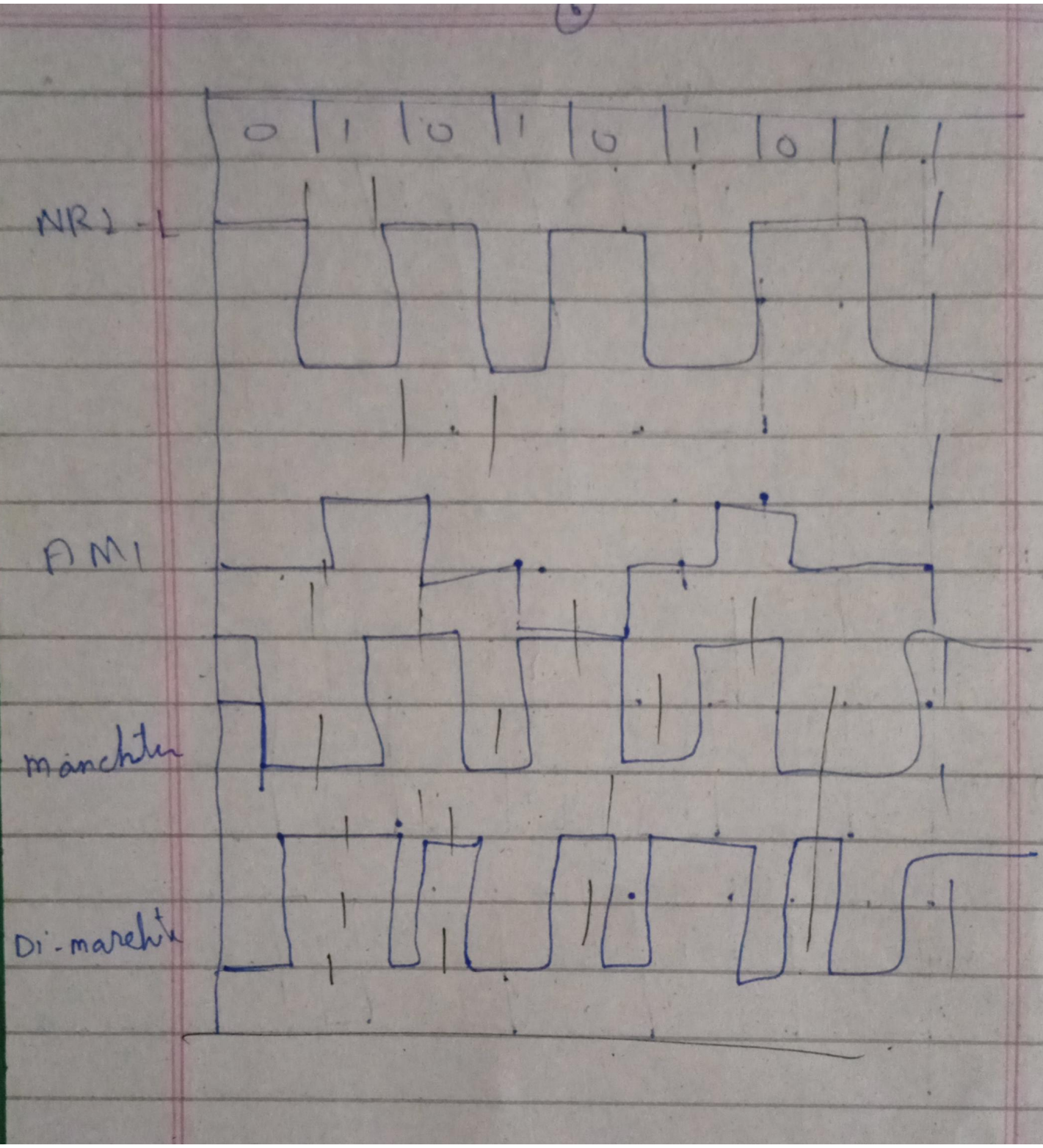
5- Completely acceptable to run in a disruption sensitive environment

6- All features have been time tested.

(5)

Q. 2.

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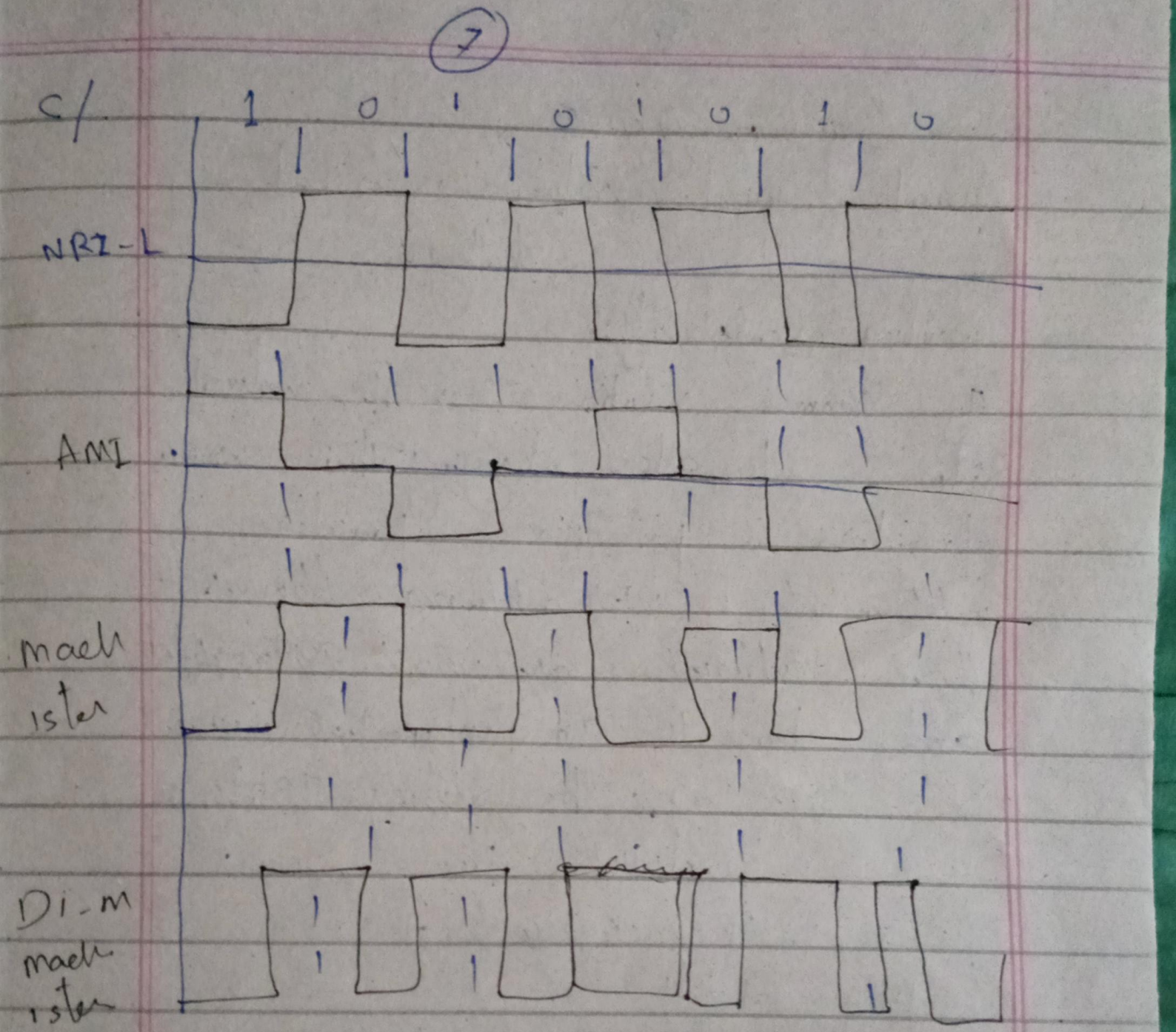

Question No: 3.

Current Wireless networks issues and challenges?

Routing scalability:

A common solution for IP network sites to allow changing their service providers is to use (provider independent (PI) addresses. However these adresses are not aggregable and lead to an exponential increase in size of the routing table in Default Free Zones (DFZs) (REC 4984, 2007)

Deploy ability.

Deploy ability of new mechanisms is an extremely important factor. The literature is rife with examples of technically superior proposals that have seen limited or no deployment in the real word owing the lack of a proper and practical deployment plan.

RF interferences :

Deploy ability of new mechanisms is an extremely important factor. The literature in

802.11 technology has ~~maid~~ made the overall Performance and reliability of WLAN networks much more suitable for daily interprise use Despite This an invisible culprit often puts a yorke in the road regarding signal strength.

radio frequency interference.

- mobile phones
- AM/FM radios
- Televisions
- Microwaves
- MRI machines.

Physically object interference/ Design.

The reliability of your WLAN is heavily dependent on not only the architecture of your hardware and software but also the design and placement of the crucial pieces of your

network so if your getting spotty signal in certain parts of your WLAN make sure that your access access points and routers are positioned optimally.

Hardware Architecture & Firmware.

Hardware issues are another major contributing factor to poor Wi-Fi performance. large WLANs more specifically the two most common hardware issues we see affecting WLAN Performance are their having not enough or too many access points or having outdated firmware.

Power configration and channel selection can make the architectural decision making process more complex.

Security Consideration:
Participants are also concerned with the security that surrounds the wireless environment itself. In order to ease there concerns, They have implemented security Protocols such as a single Sign - on.

Network management issues:
The study suggests that it professional get a good idea of weather They are successful managing their wireless environment by the volume of help desk calls They receive. Some organization are trying to identify problems before They come to the attention of their User by implementing a formalized rounding program to survey staff about the issues by the issues They might be having and run reports on devices.

Future wireless Network challenges:

1. One of the challenges of designer of wireless hardware is to enable Terminal with multiples modes of operation to support different application. Desktop have Computer have currently have the capability of procesing voice. image, text and video data for small, light weight, hand held devices, however breakthroughs in Circat design will be neconary before multimode operation can be implemented Because most people will not cary around a 20-pound battery the signal procesing and communication hardware of portable terminals must consume very little power. Many of today signals procesing techniques that increase channel capacity and mitigate channel impairments require a lot of procesing power.

2- Another major design challenge will be overcoming the capacity limits. Interference level and random variation of the wireless channel significant breakthroughs have been made in this area over the last decade, driven mainly by commercial cellular technology. These breakthroughs include multiple antennas at the transmitter and receiver to increase level channel capacity. Sophisticated coding strategies to correct channel induced bit errors multiuser detection techniques to reduce interference equalization spread spectrum and multicarrier modulation to reduce self interference from signal reflection adaptive modulation to optimize performance over time varying channels.

3- Another significant challenges is that the network with be must be able to locate a given user among millions of mobile frames and route a call to that user. which could be moving at speeds of up to 100 mph The finite sources of the network must be allocated fastly and effeciently to meet changing user demands and location.

4- wireless system must support wireless application which may have very different requirements it is impoxible to design a "One size fits all" wireless network that can support all of the applications that exists today. let alone the application that will evolve in the future. moreover it is impoxible to guarantee fixed performance metrics for a wireless network because of the underlying random

channel and network dynamics. Thus wireless application will have to be adapted to these dynamics to deliver the best end-to-end performance.

5. Bottom of form There are facinating engineering challenges ahead in the field of software defined radios and cognitive radio. Rather than having to engineer all the advancements discussed above into new radio hardware and worry about them quickly becoming outdated we may be able to add capabilities to our wireless system today. As new spectrum or encoding methods become available we could update existing device in place.