

PAW

PAW for TSCH

draft-thubert-paw-for-tisch



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Status

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⇒ Inherits from <https://tools.ietf.org/html/draft-thubert-6tisch-4detnet-01>

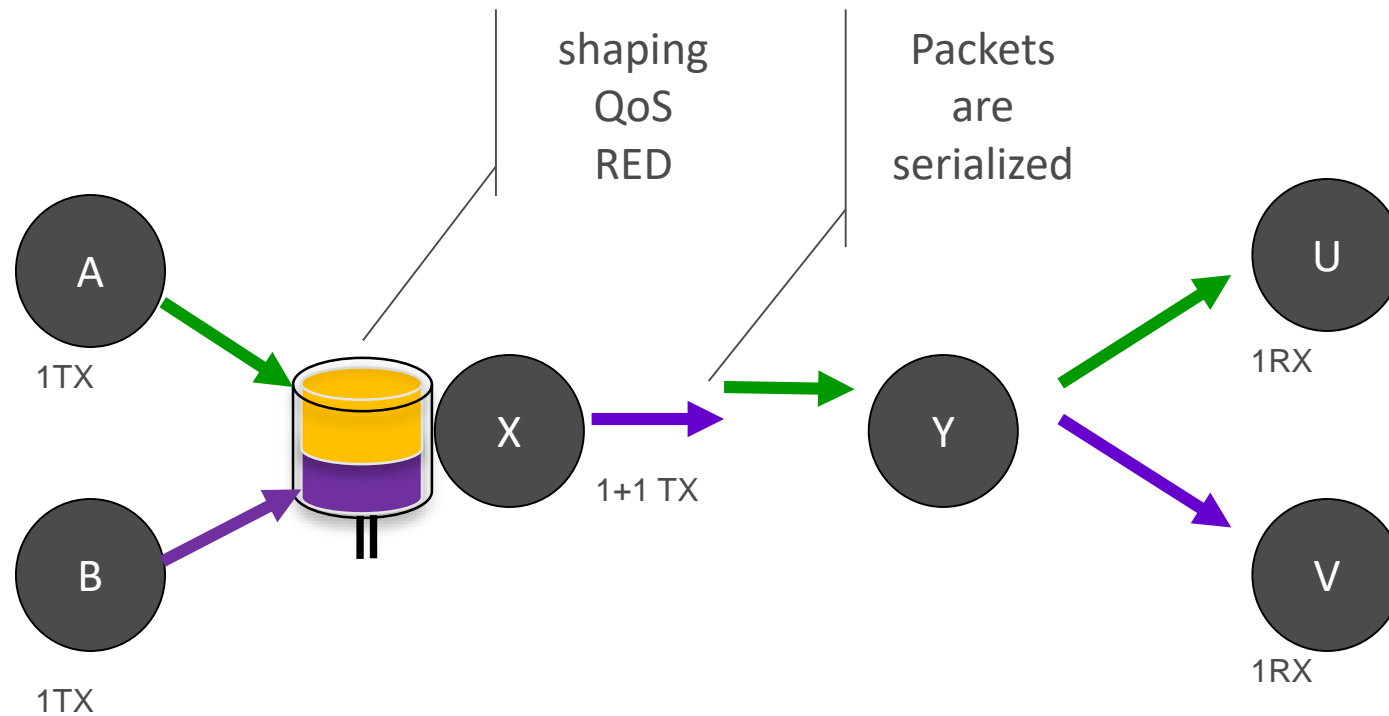
Expresses how wireless can be specific

Discusses Needs of 6TiSCH on DetNet/PAW for

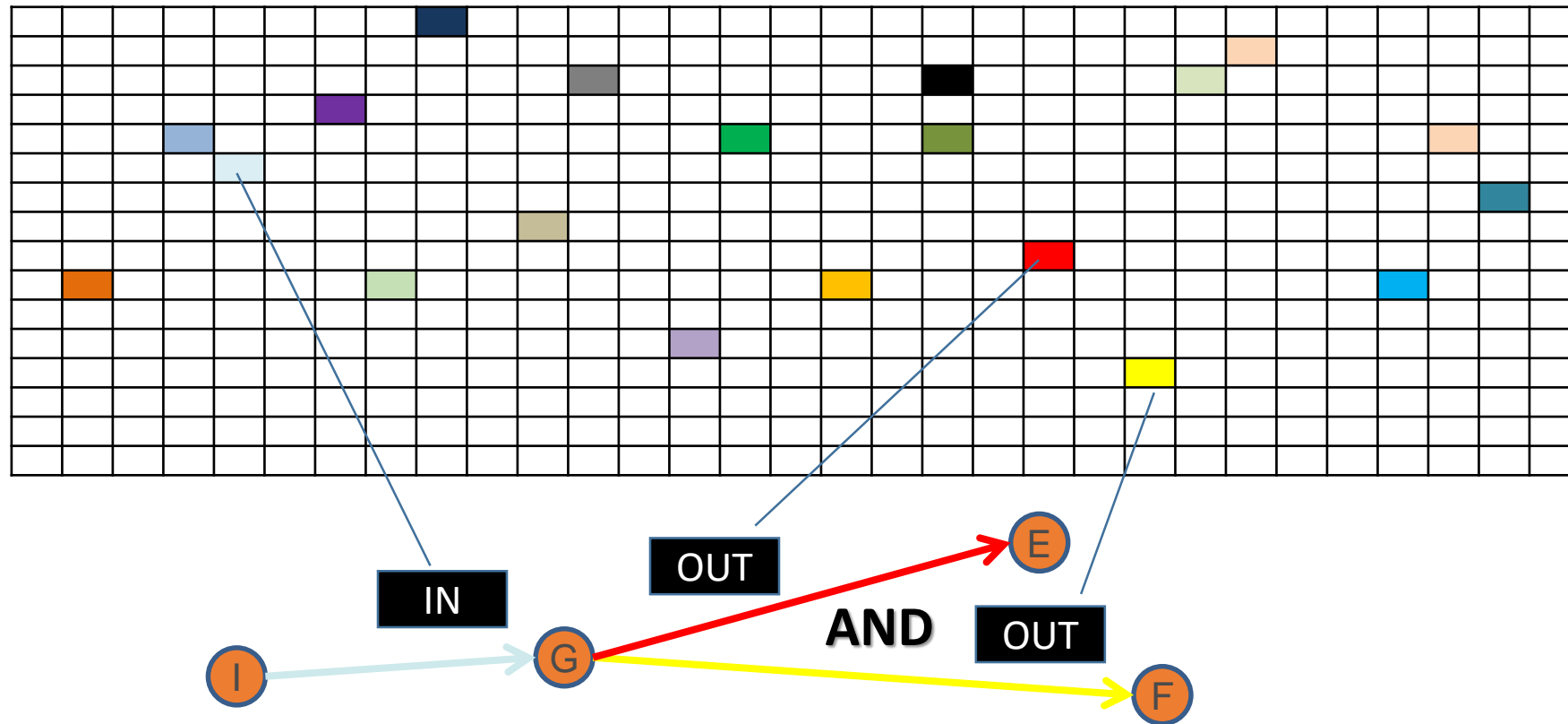
Track management (Setup)

and operation (OAM)

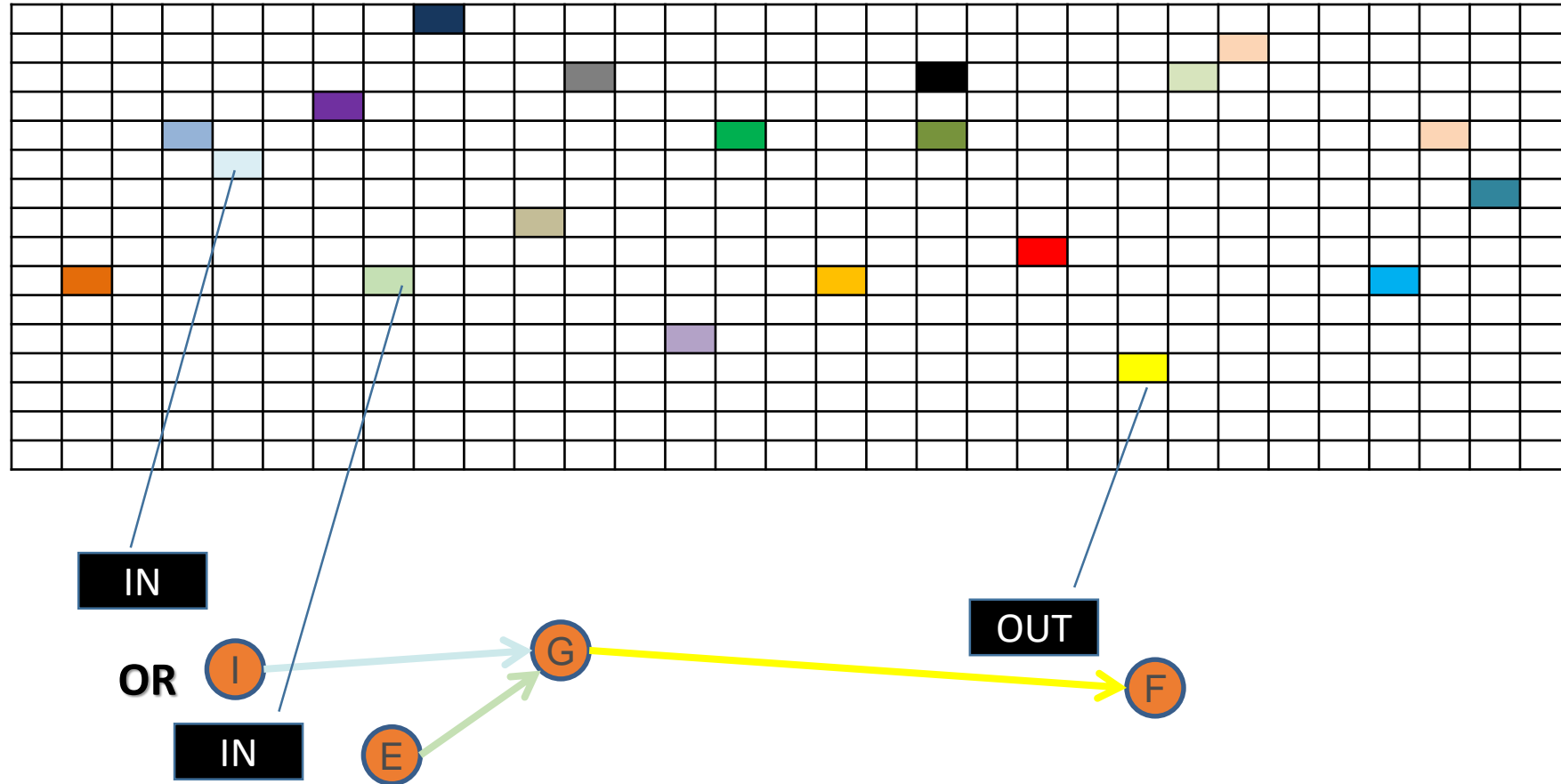
Normal L3 operation



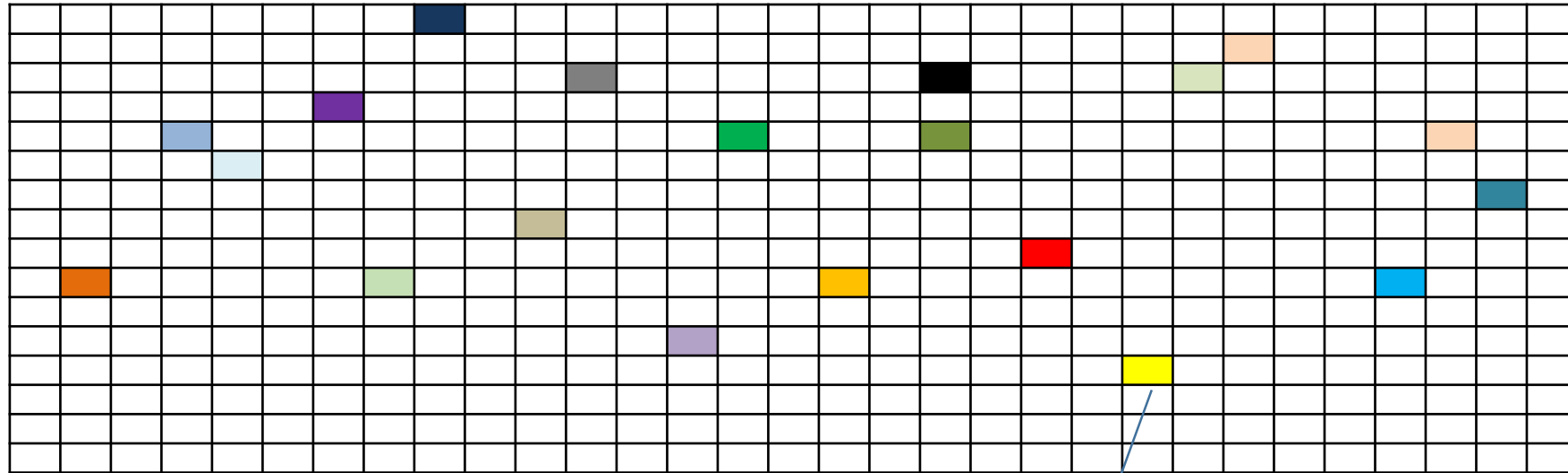
DetNet operation: Replication



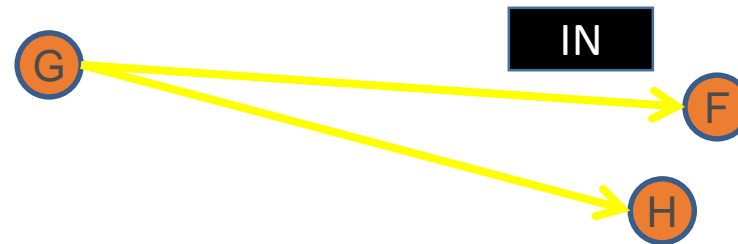
DetNet operation: Elimination



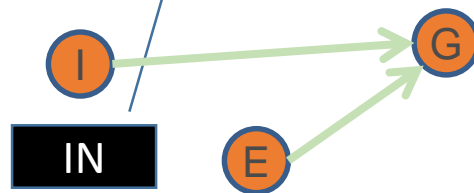
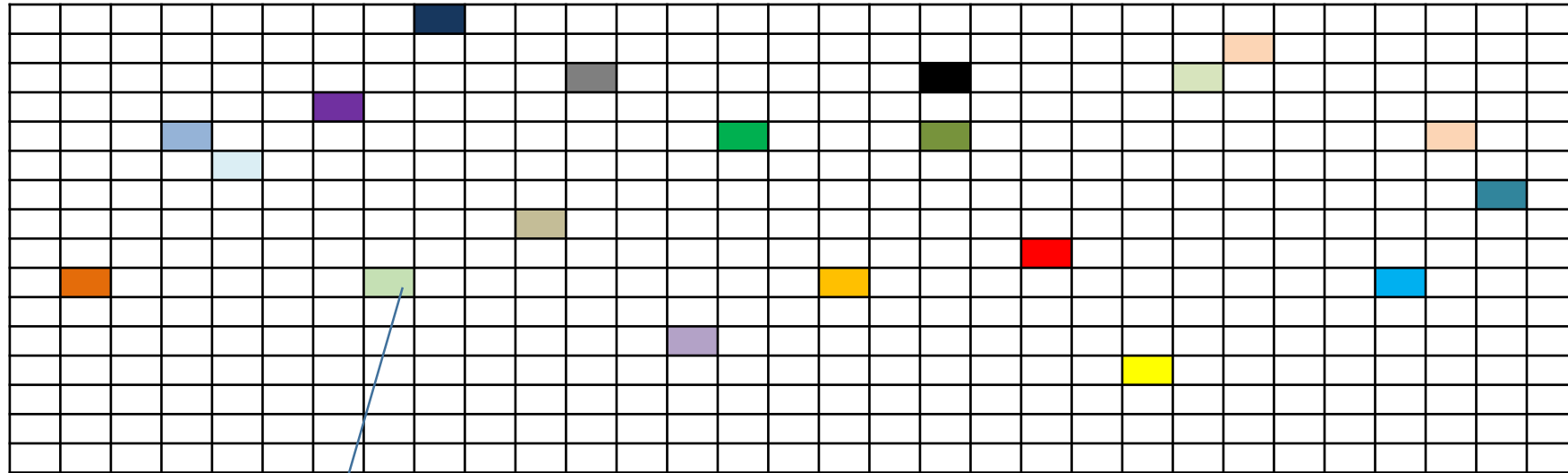
Unusual operation: Overhearing



The broadcast nature of the medium allows to compensate for the lossy nature by overhearing

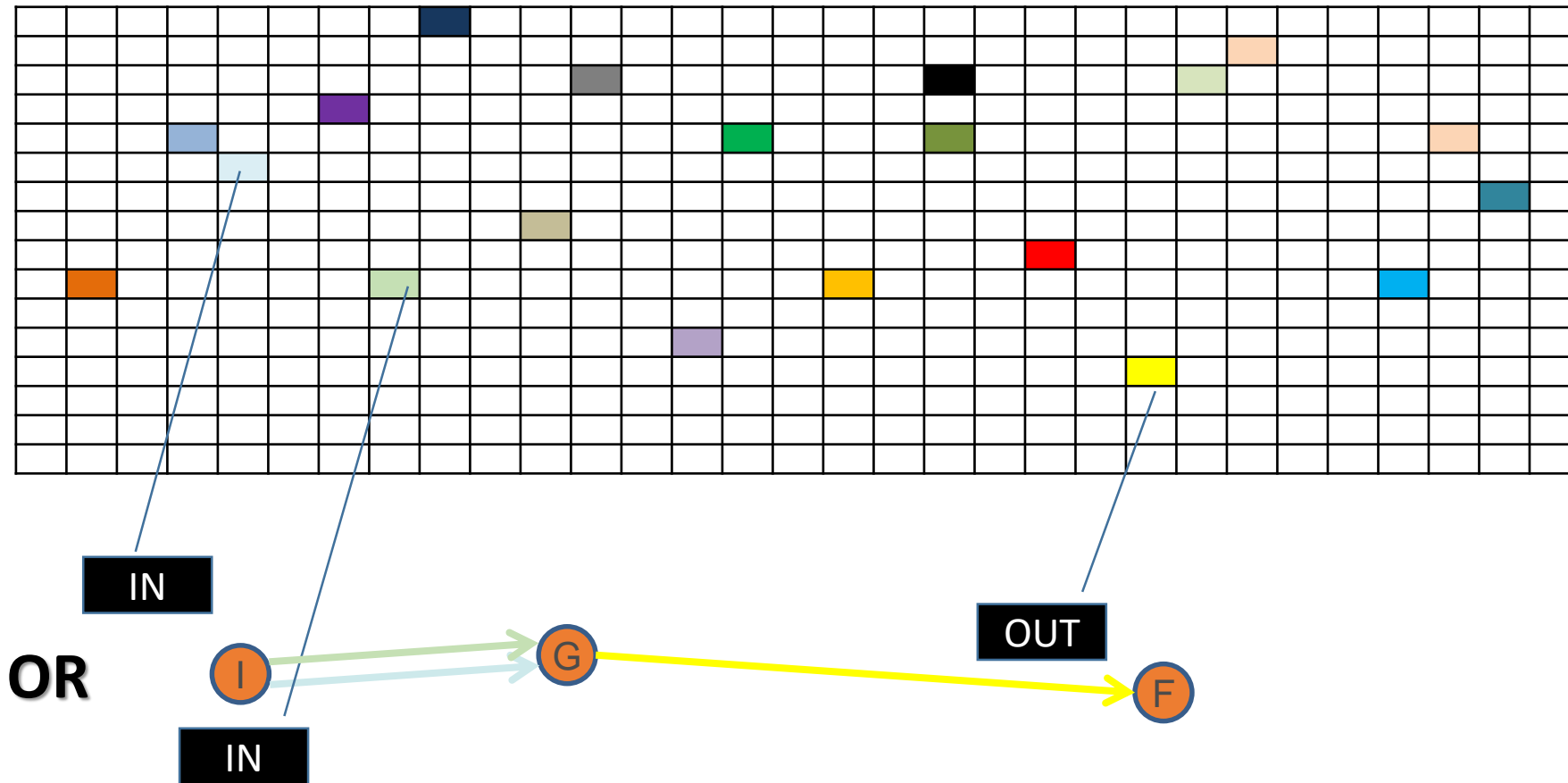


Unusual operation: Constructive interference



Multiple tightly synchronized transmissions can also compensate for the lossy nature by overhearing

Unusual operation: ARQ



Goals for PAW:

Optimize delivery ratio within schedule via

Spatial Diversity: Track, Beamforming

Time Diversity: ARQ, TDMA

Frequency Diversity: Channel Hopping and rotation (TSCH), FDMA

Exploit Radio unique capabilities

Overhearing, reflections, constructive interferences

Preserve resources

Energy (Battery), Spectrum