

# ***Inputs to NC architecture***

For discussion purposes...

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# *Doing things in the right (?) order*

- STEP 1: define and agree on terminology
  - almost done, but needs to be **formalized**
  - TODO: add proposed terminology to existing I-D  
<http://tools.ietf.org/id/draft-firoiu-nwcrp-network-coding-taxonomy-00.txt>
- STEP 2: gather use-cases and examples
  - almost done
  - TODO: document it in an informational I-D
    - **single/multi-sources, intra/inter-flows, e2e/in-net recoding, single/multi-paths, uni/multi/broadcast, unidirectional/with return paths, transport/network/MAC layer + examples**

# Doing things in the right order (2)

## ● STEP 3: specify signaling aspects

- “NC FEC Schemes BB” (similar to [rfc5052](#) “FEC BB”)
  - defines rules followed by future FEC schemes
  - defines signaling, but not necessarily the details that may be FEC Scheme specific:
    - symbol idf, in-band/out-of-band signaling, scheme idf, etc.
  - far from trivial as it needs to apply to all use-cases
  - TODO: dedicated I-D
- “Common NC header BB” for transport-level PI (inspired from LCT, [rfc5651](#))
  - defines a common header format applicable to many use-cases and PIs...
  - TODO: dedicated I-D
- Open Point: can network-level NC share this CNCH?

# Doing things in the right order (3)

- “Common NC header for embedded platforms BB”
  - can be pretty different from the previous general purpose one due to specific constraints
  - **TODO: dedicated I-D**
- **STEP 4: specify building blocks**
  - many BBs will depend on STEP 3 outputs
  - **TODO: several FEC Scheme BBs, window management BB, compressed Symbol ID list BB, Congestion Control (when needed) etc.**

# Methodology

- create interest
  - everybody's welcome
- use a shared repository for the docs
  - github
- have all discussions on nwcrg mailing list
  - no private discussions please
- define milestones
  - IETF93: I-Ds for steps 1 and 2 should be available for group validation, ideas for steps 3 presented
  - TBD