

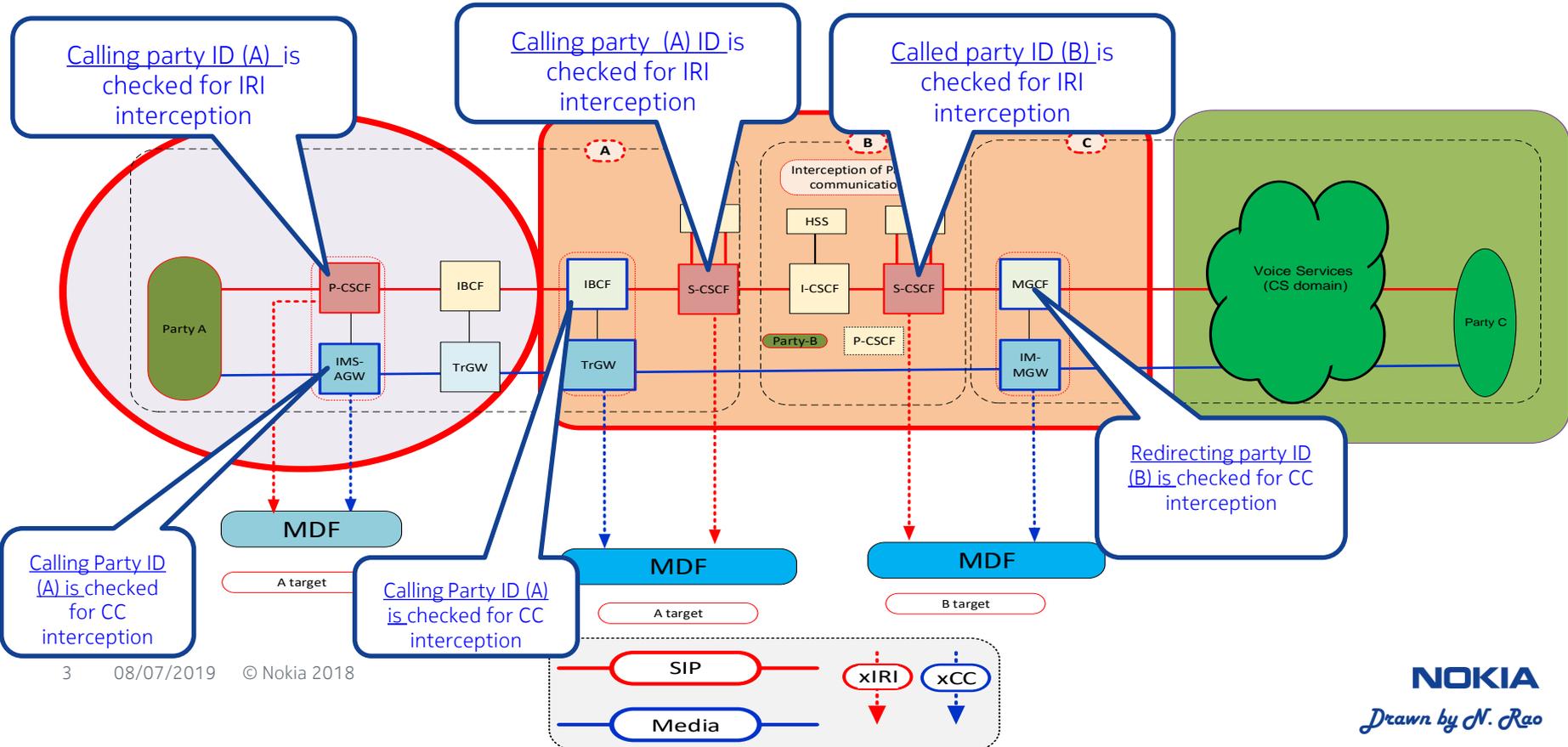
Non-local ID target interception

Roaming with local breakout (LBO)

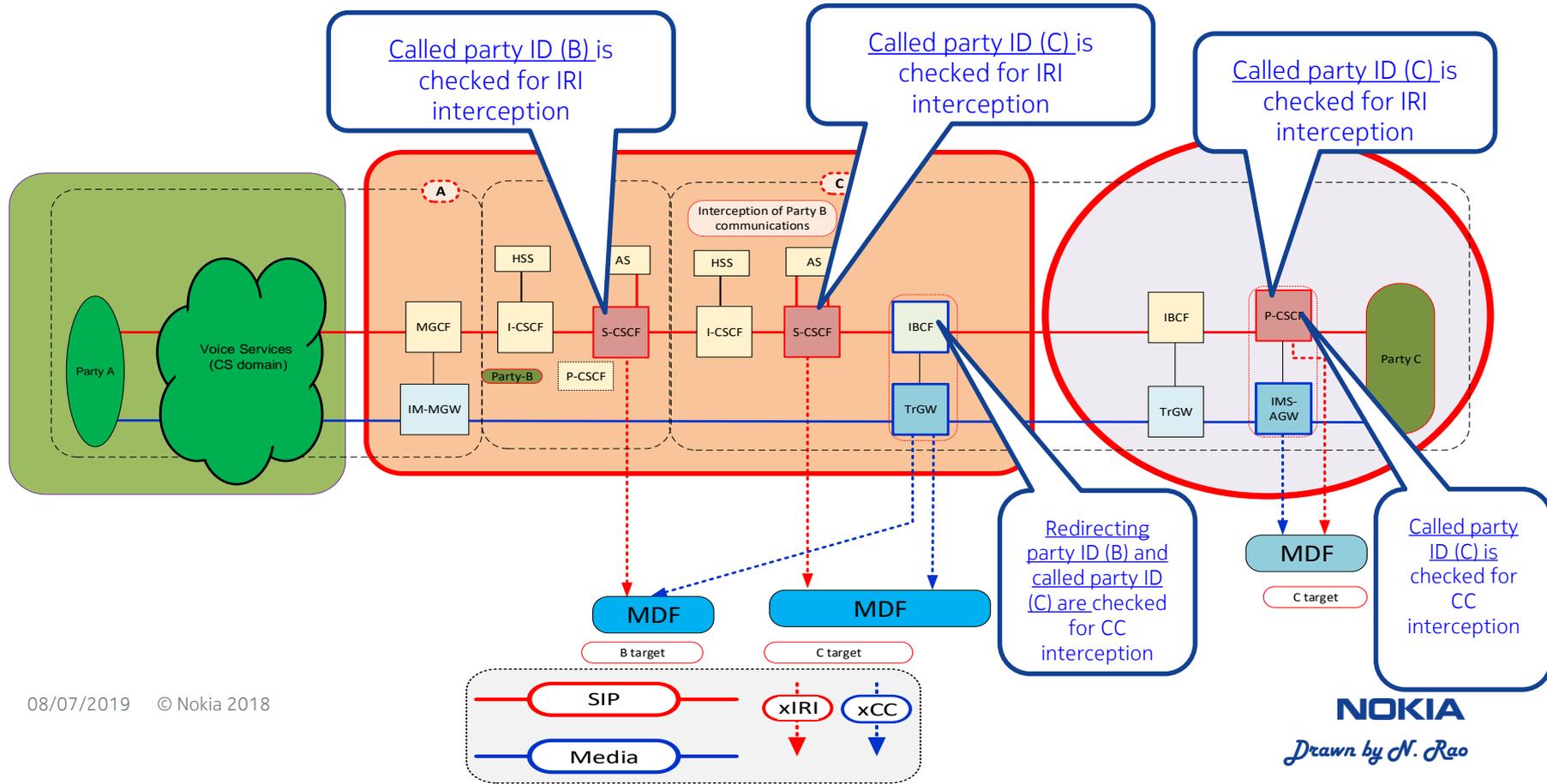
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Overview current LI for roaming targets (HPLMN & VPLMN)

Roaming (LBO) Party A (target) calls party B (target) redirected to party C (in CS domain) VPLMN and HPLMN intercepts are independent of each other

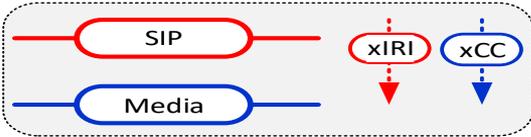
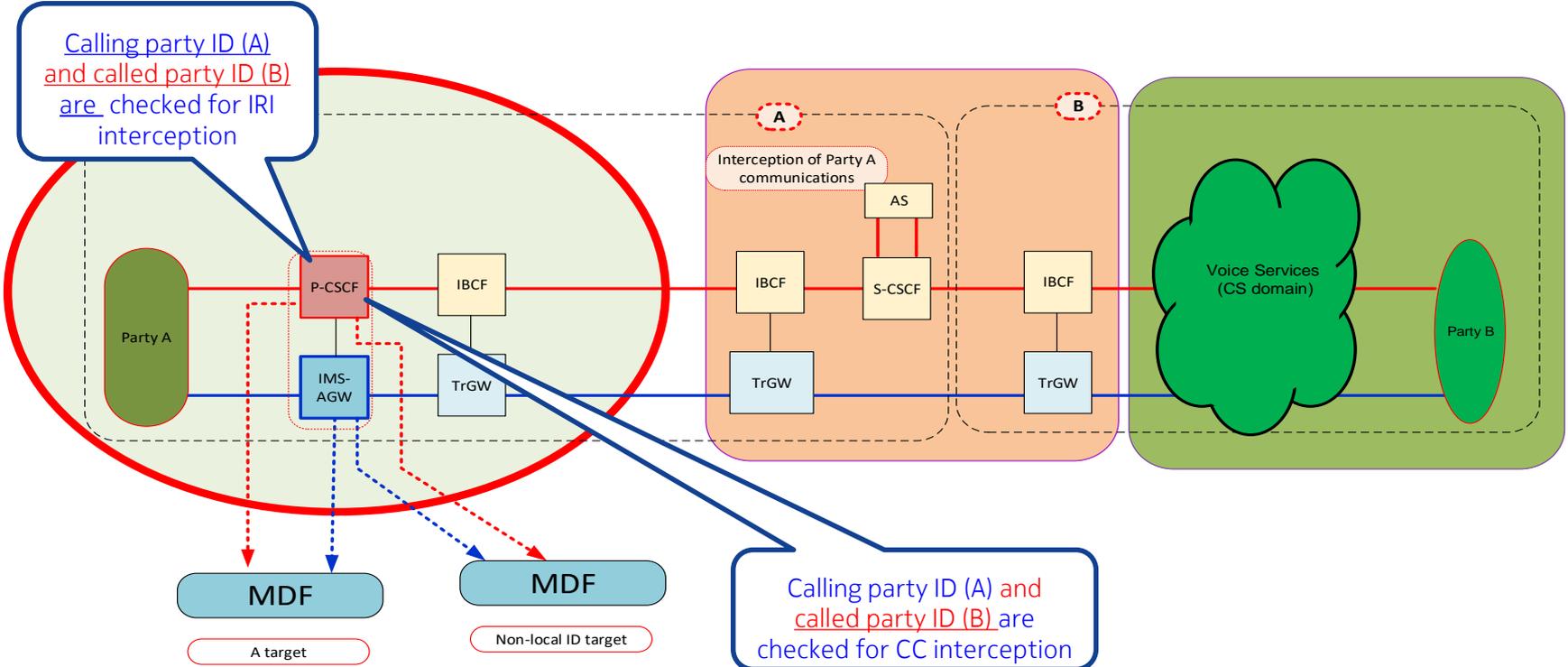


Party A (CS domain) calls roaming party B (target VPLMN and HPLMN intercepts are independent of each other)

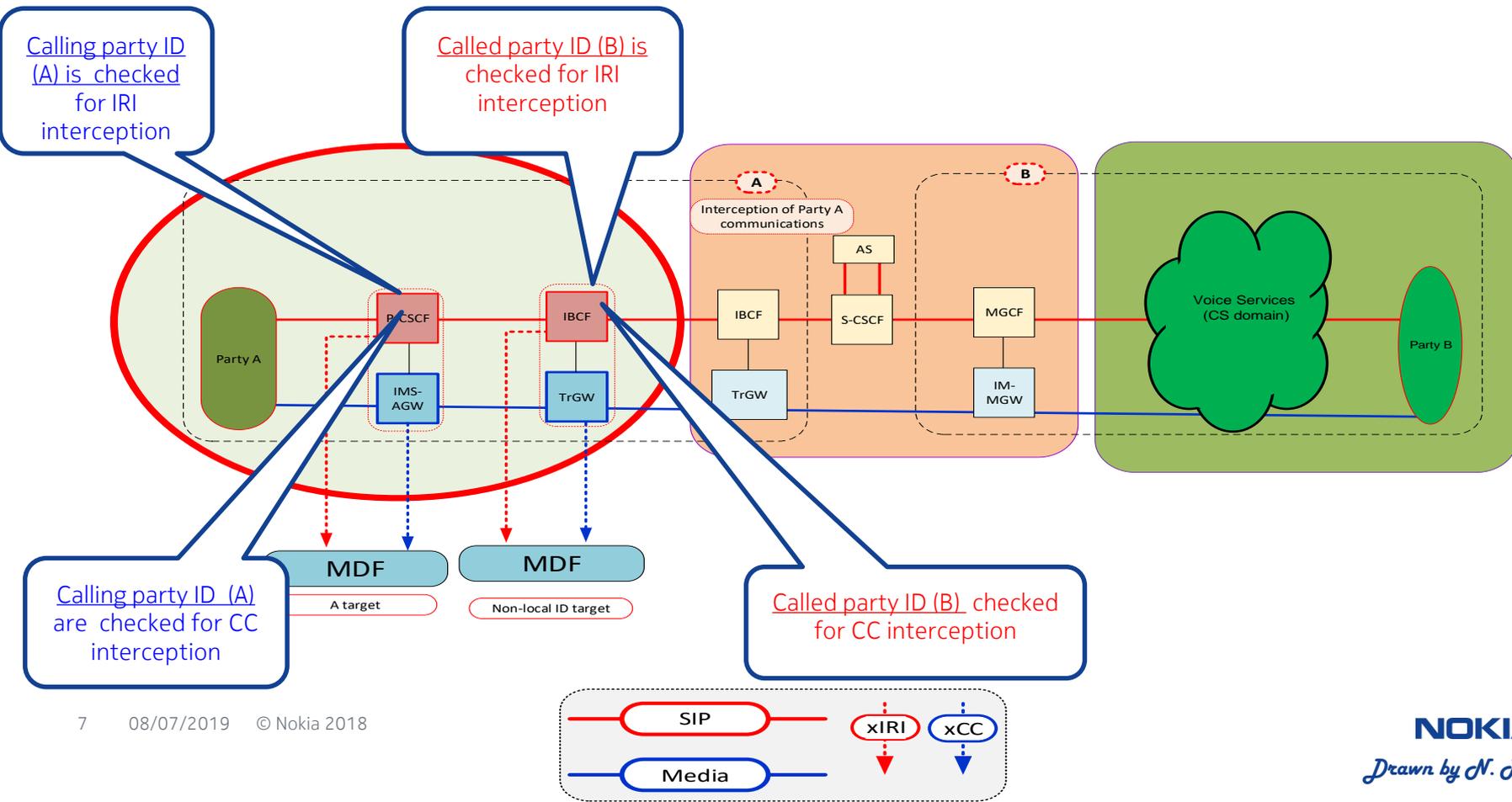


Non-local ID target (LI at VPLMN)

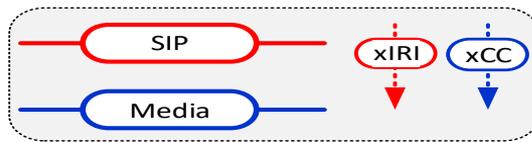
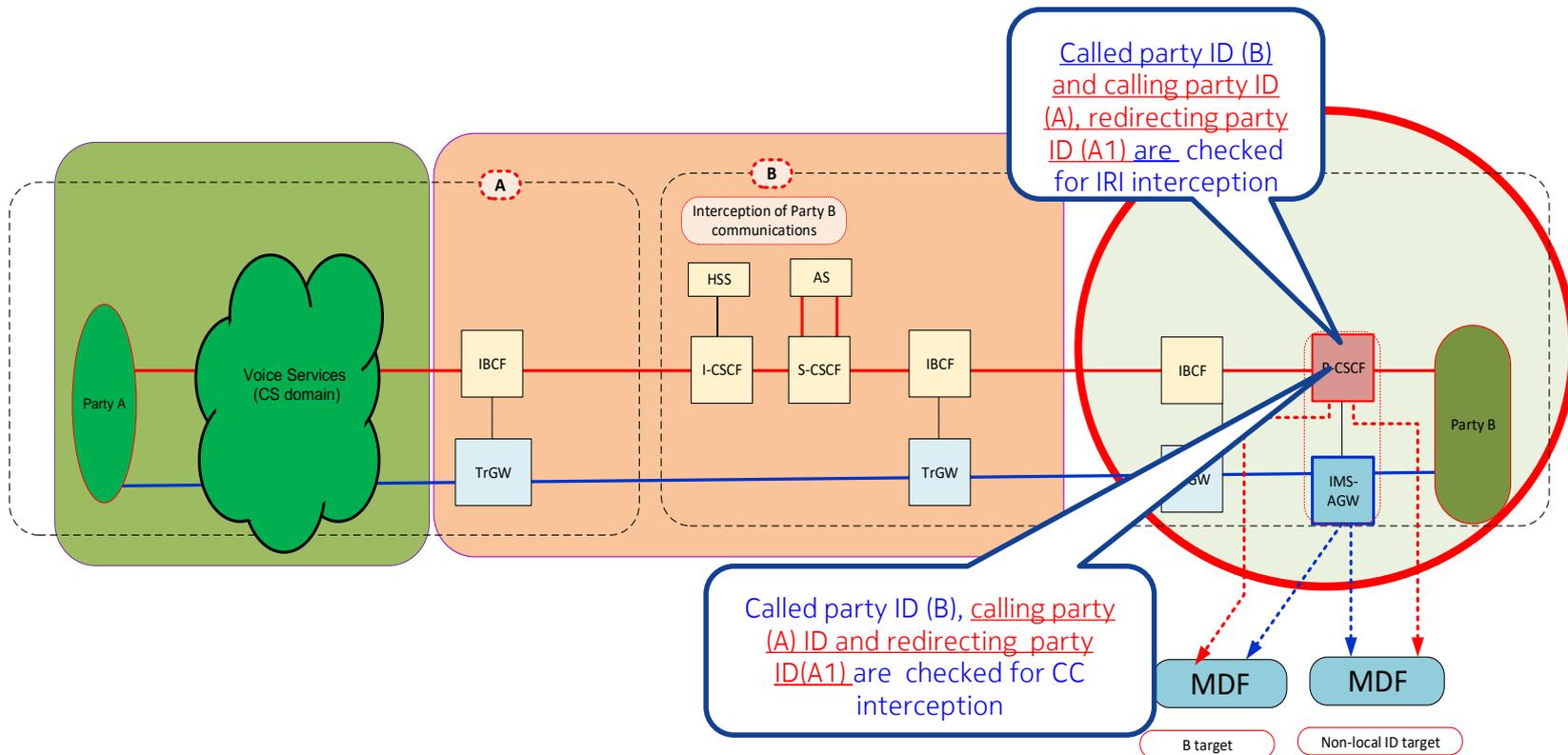
VPLMN: Roaming party A calls party B (non-local ID target) – method 1



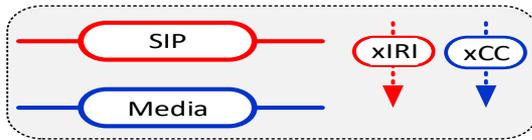
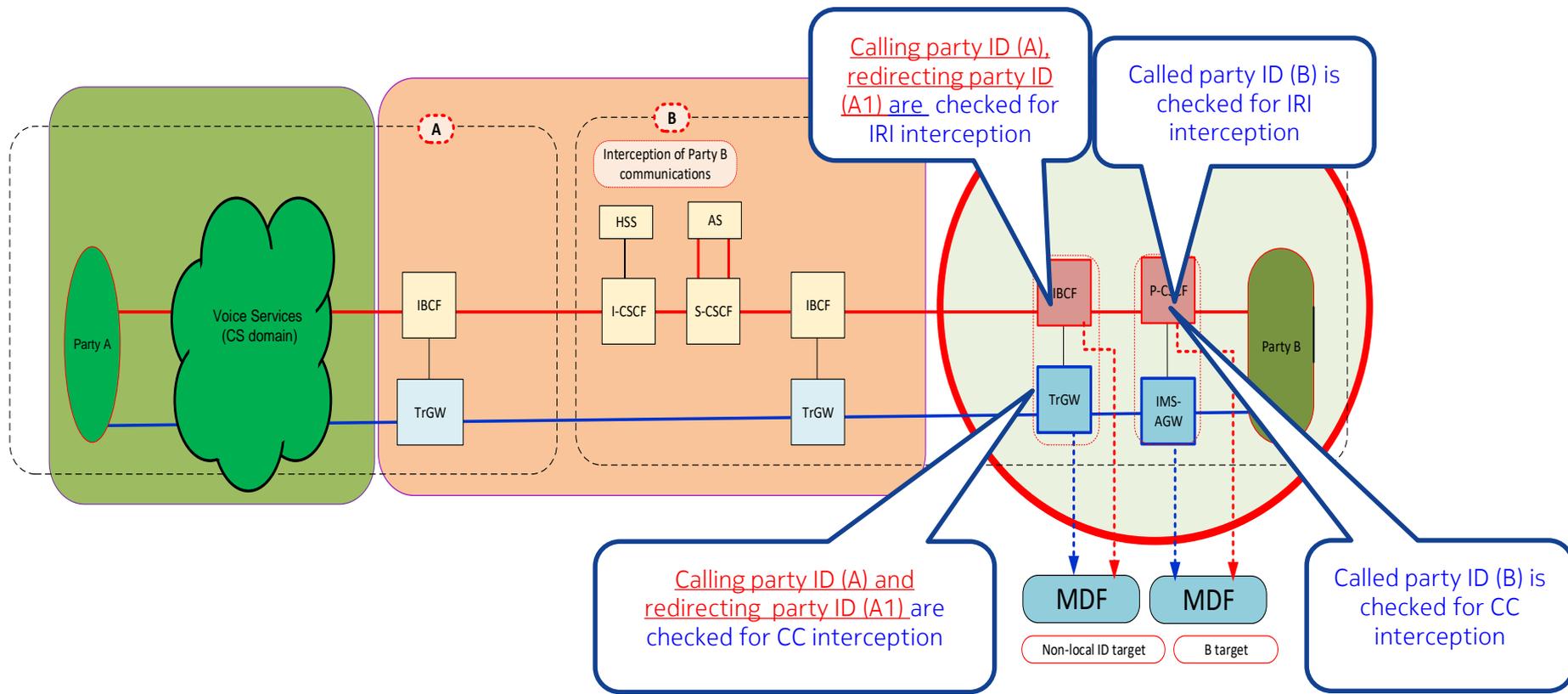
VPLMN: Roaming party A calls party B (non-local ID target) – method 2



VPLMN: Party A (non-local ID target) calls roaming party B – method 1



VPLMN: Party A (non-local ID target) calls roaming party B – method 2



Method	Scenario	IRI-POI	CC-POI	Pros	Cons
Method 1	A side non-local ID target	P-CSCF	IMS-AGW	<ul style="list-style-type: none"> • Uses the existing IRI-POI and CC-POI 	<ul style="list-style-type: none"> • New filtering will have to be added.
	B-side non-local ID target	P-CSCF	IMS-AGW		
Method 2	A-side non-local ID target	IBCF	TrGW	<ul style="list-style-type: none"> • IRI interception and CC interception at the edge of the network closer to the intercepting non-local ID target (current architecture principles). • No change to the filtering criteria in the existing IRI-POIs/CC-TF 	<ul style="list-style-type: none"> • New POI functions have to be added to IBCF • May create a architectural issue if RAVEL (loopback mode) needs to be supported.
	B-side non-local ID target	IBCF	TrGW		

- In method 1, the following changes are required to support CC interception:
 - Originating end of P-CSCF **has to add a check for called party ID**
 - Terminating end of P-CSCF **has to add a check for the calling party ID and redirecting party ID check**
- In method 2:
 - No change to P-CSCF
 - **IBCF requires the IRI-POI functions.**

Unlike the HPLMN case, for the interception to be done in the VPLMN, no considerations have to be given like redirected call scenarios. Double interception possibility does not arise. Therefore, the P-CSCF can be enhanced to provide the IRI-POI functions.

This presentation recommends Method 1 as default and method 2 as an option.

NOKIA