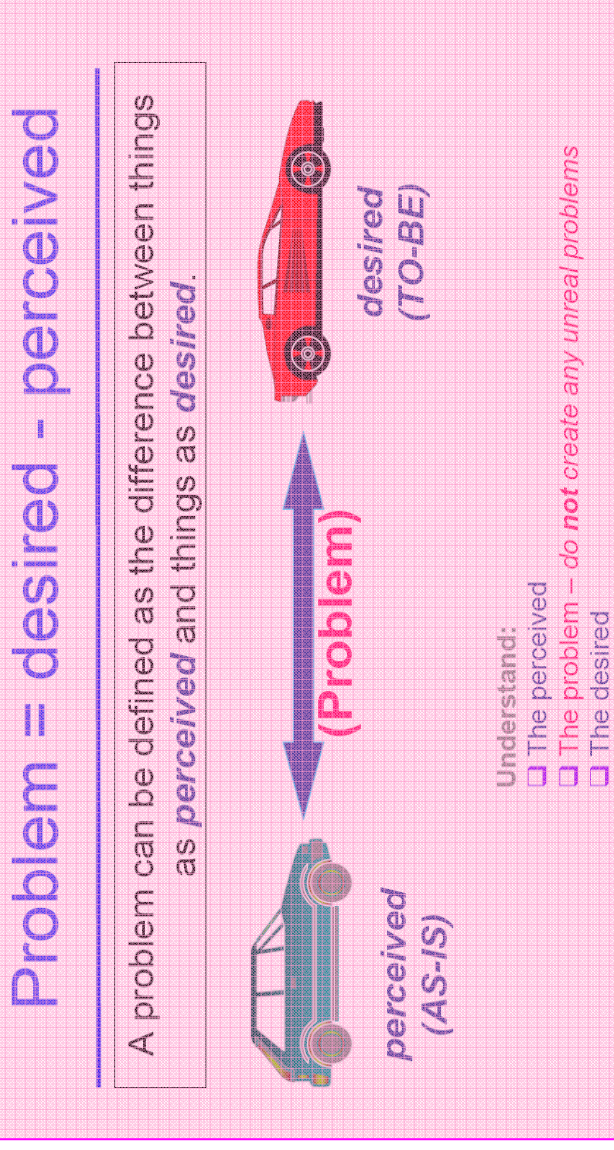


Requirements Evolution: AS-IS vs. TO-BE

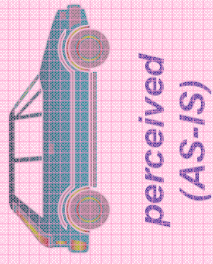
Recall:



AS-IS vs. To-BE in Requirements Evolution

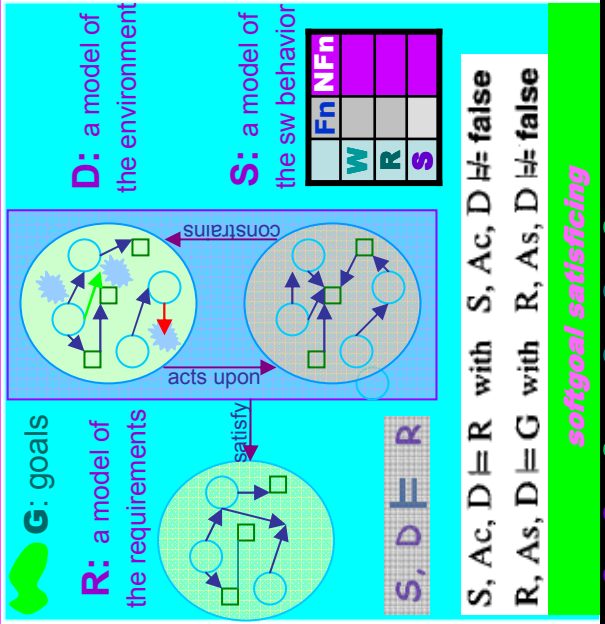
Problem = desired - perceived

A problem can be defined as the difference between things as *perceived* and things as *desired*.



- Understand:
- The perceived
 - The problem -- *do not create any unreal problems*
 - The desired

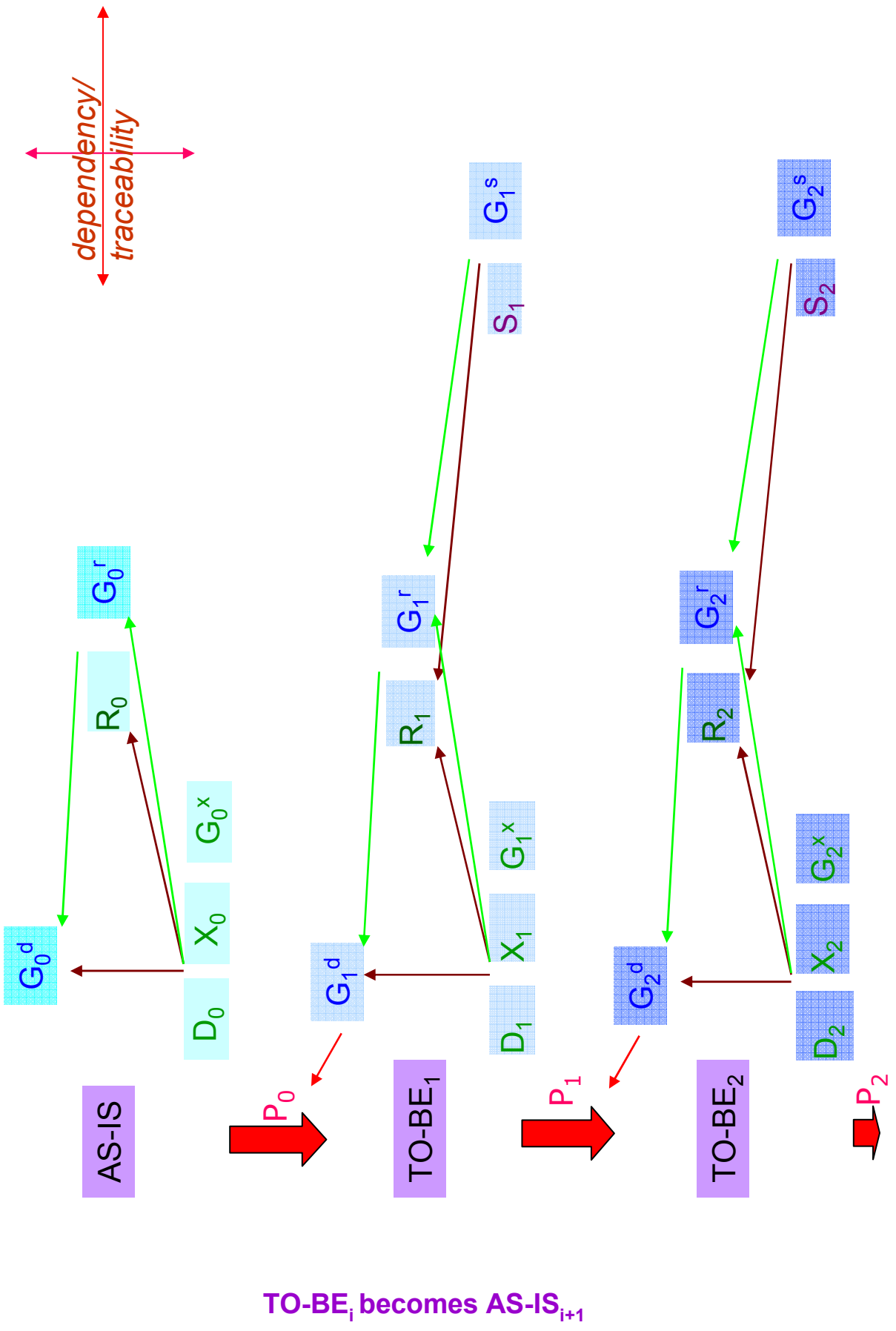
*In RUP, vision doc. = problem stmt



M^G, Prog^G ⊨ S^G; S^G, D^G ⊨ R^G; R^G, D^G ⊨ G; (G ⊨ ¬P) V (G ⊨ ¬P)

Property Preserving Evolution

$$(G_i^s, S_i), (D_i, X_i, G_i^x) \vdash R_i; (G_i^r, R_i), (D_i, X_i, G_i^x) \vdash G_i^d$$



TO-BE_i becomes AS-IS_{i+1}

Is the following AS-IS or TO-BE?

ER-Fi: The initiator may ask important participants to state preferences about the meeting location

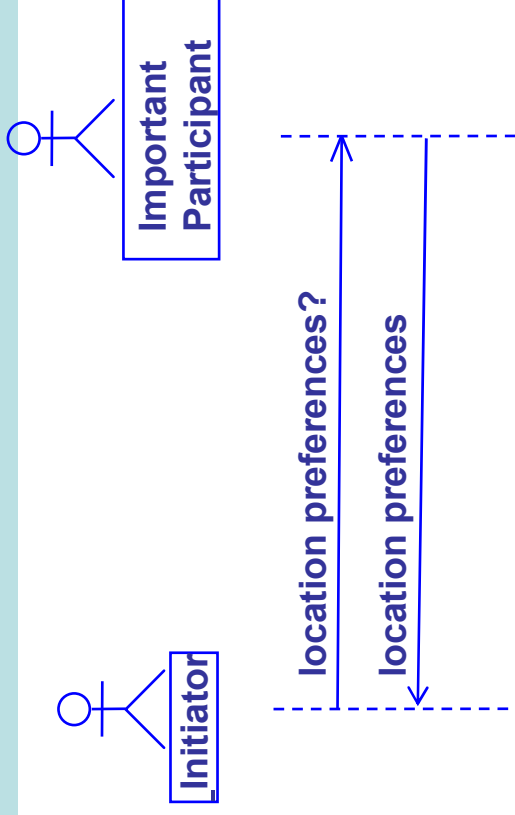
ER-NFi: furthermore it should ideally belong to one of the locations preferred by as many important participants as possible. It is absolutely necessary, however, to allow each meeting to take place in a virtual place, e.g., through teleconferencing using laptop computers. This flexibility is considered crucial in future. The number of negotiations should be kept minimal, but a new round of negotiation may be required when no such room can be found.

S-FRj:SDMS shall assist users in the following activities:

- Monitor meetings, especially when they are held in a distributed manner;
- Plan meetings under the constraints expressed by participants (see domain theory);
- Replan a meeting to support the changing user constraints, for instance:
 - to modify the exclusion set, preference set and/or preferred location before a meeting date/location is proposed; and
 - to take some external constraints into account after a date and location have been proposed --- e.g., due to the need to accommodate a more important meeting --- here, the original meeting date or location may then need to be changed; sometimes the meeting may even be cancelled.

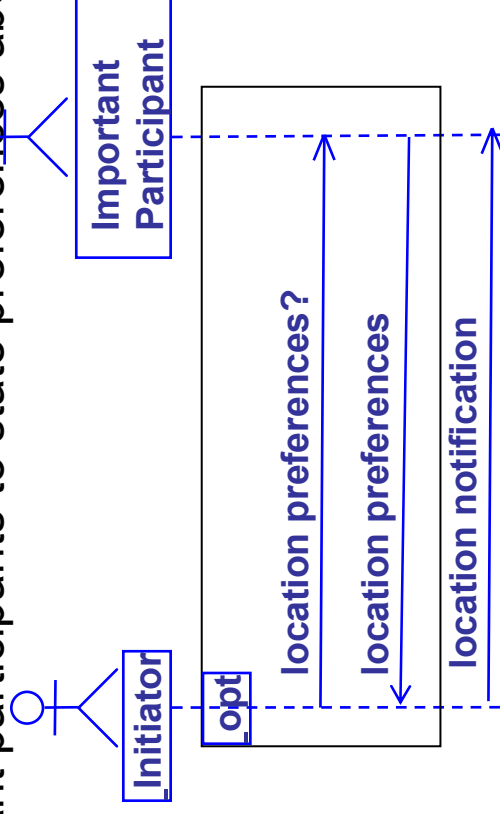
S-NFRj: The meeting date and location should be as *convenient* as possible, and available as *early* as possible, to all (potential) participants;

ERi: The initiator may ask important participants to state preferences about the meeting location



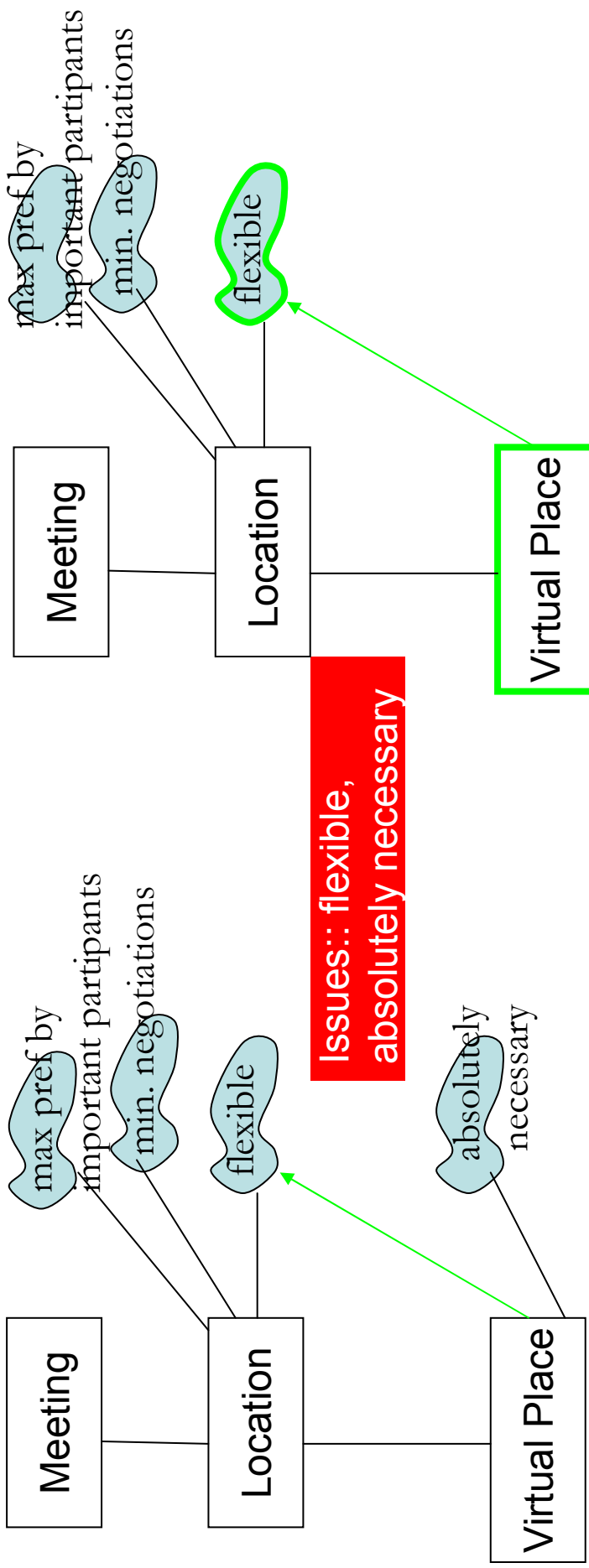
Issue::ERi: The initiator *may* ...

- ERi: The initiator shall determine the location
- ERi.1: on her own and notify all the potential participants or
- ERi.2: ask important participants to state preferences about the meeting location



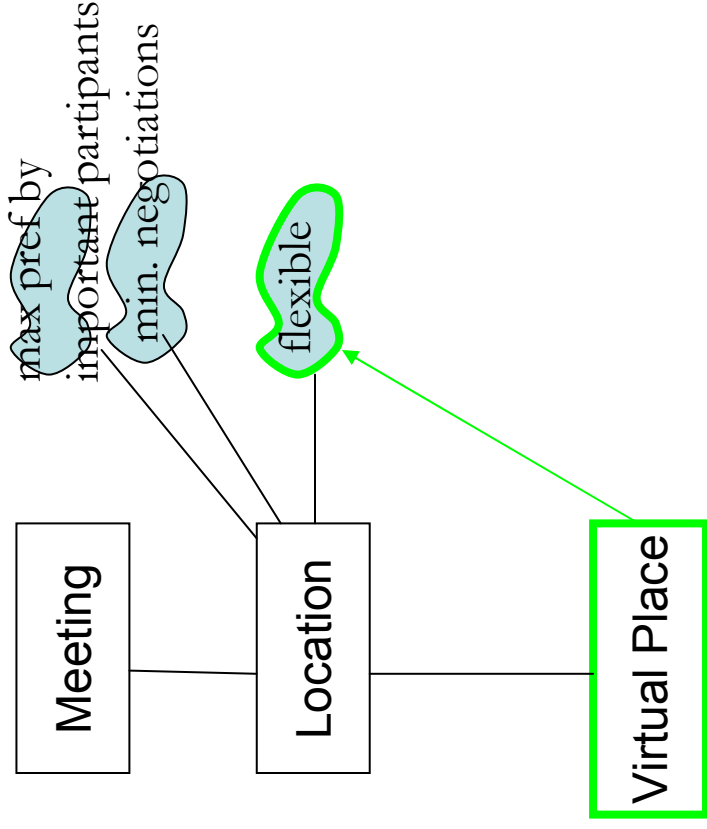
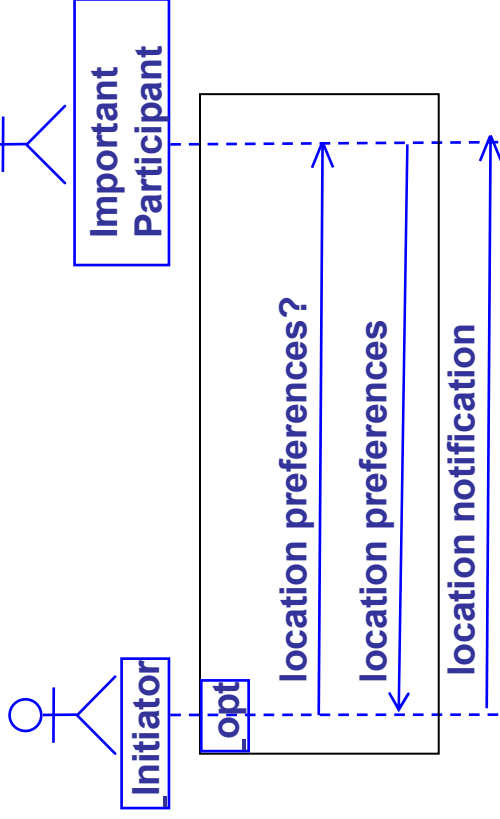
ERi: The initiator may ask important participants to state preferences about the meeting location

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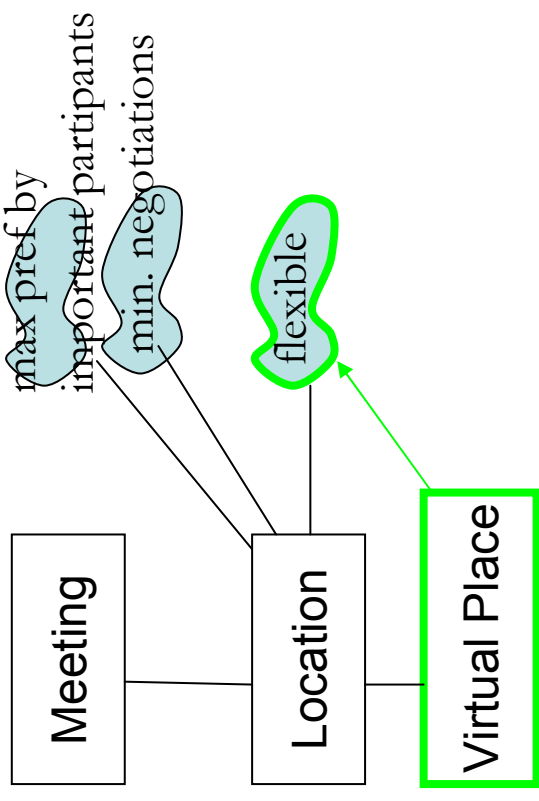
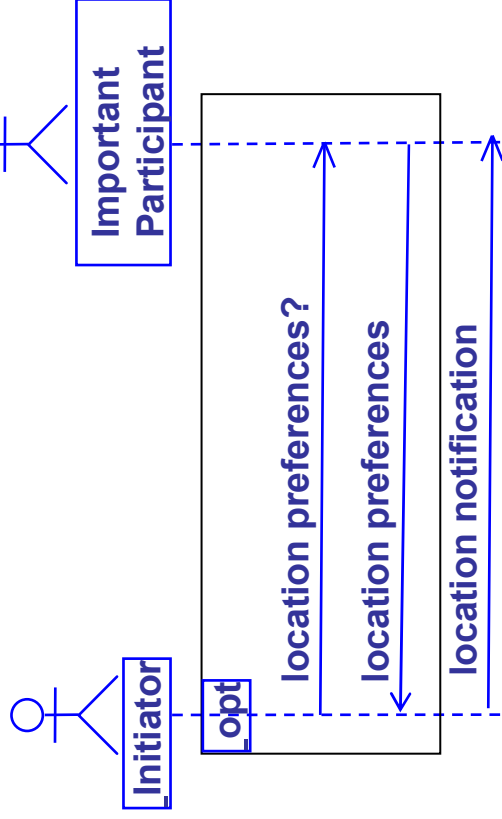


What else?

- ERi: The initiator shall determine the location
- ERi.1: on her own and notify all the potential participants or
- ERi.2: ask important participants to state preferences about the meeting location



- ERi: The initiator shall determine the location
- ERi.1: on her own and notify all the potential participants or
- ERi.2: ask important participants to state preferences about the meeting location



What is the following, then – problem or solution?

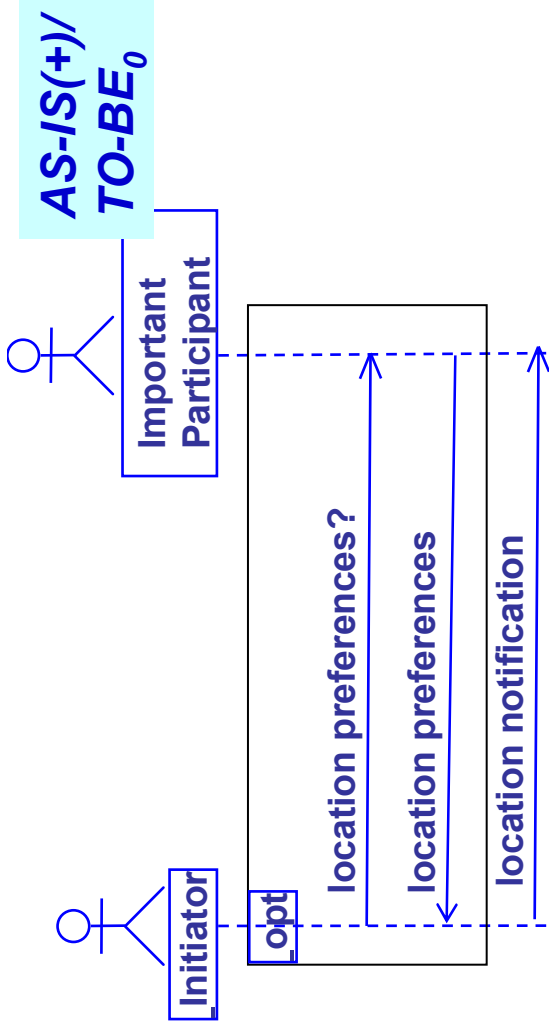
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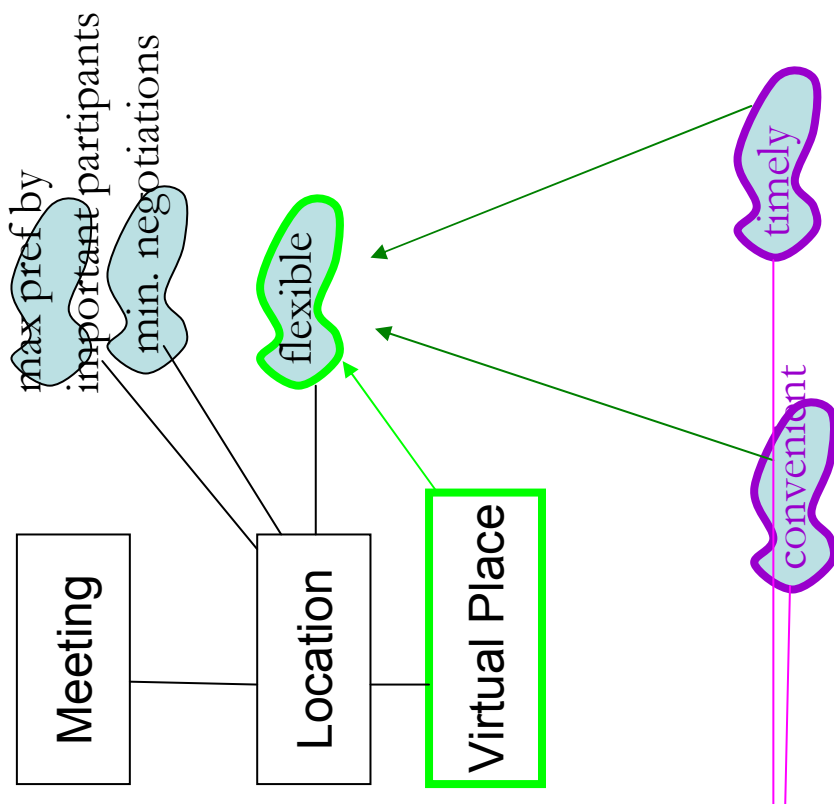
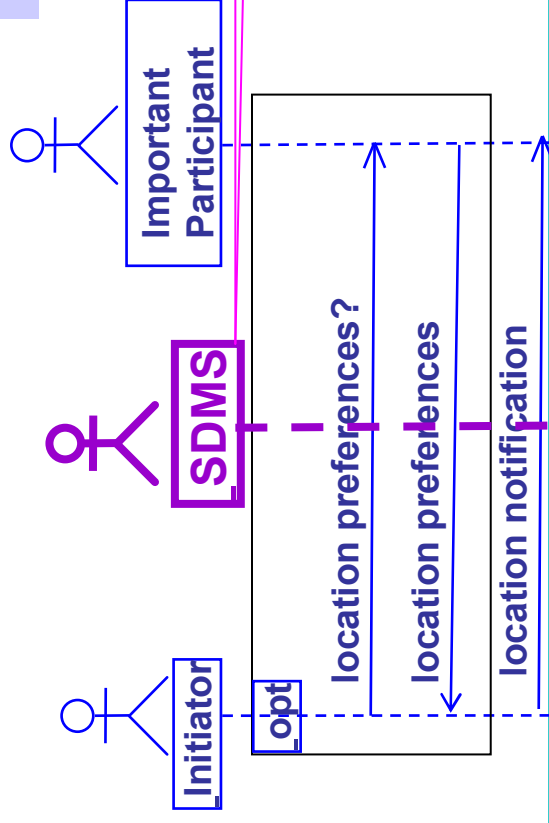
for instance:

- to modify the exclusion set, preference set and/or preferred location before a meeting date/location is proposed; and
- to take some external constraints into account after a date and location have been proposed --- e.g., due to the need to accommodate a more important meeting --- here, the original meeting date or location may then need to be changed; sometimes the meeting may even be cancelled.

S-NFRj: The meeting date and location should be as *convenient* as possible, and available as *early* as possible, to all (potential) participants;



To-BE₁



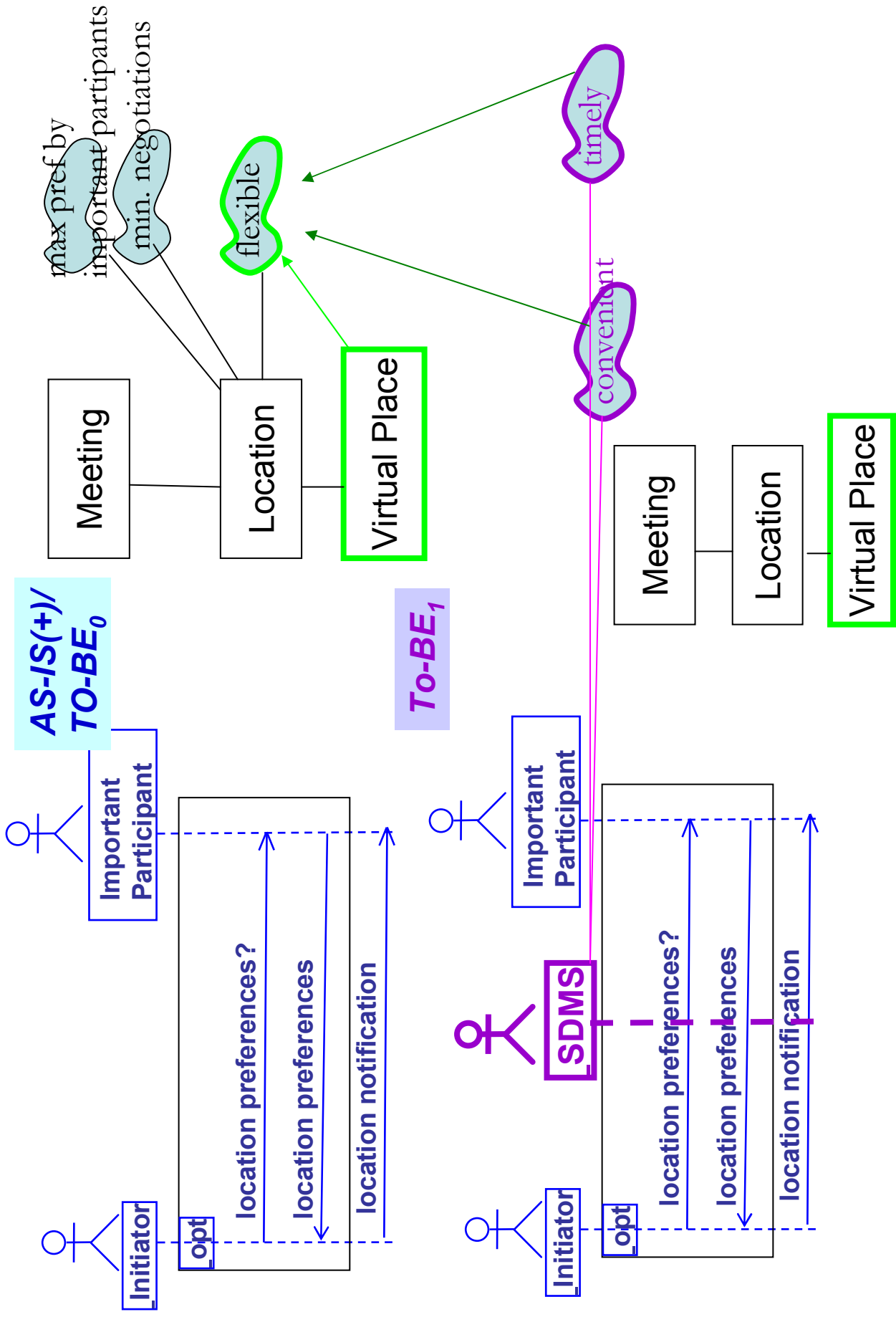
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S-NFRj: The meeting date and location should be as *convenient* as possible, and available as *early* as possible, to all (potential) participants;

Traceability means many things will often need to be repeated or look similar



Would the following be about AS-IS or TO-BE?

