

Academic mobility

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Abstract

Volumes of paperwork and extensive experience on academic mobility can be refined and shared through precise and easy-to-understand diagrams of process (EPD) and communication (IFD).

1 Overview

Under the aegis of academic mobility programmes such as Erasmus+ ([website](#)), students may carry out part of their studies in ‘host’ institutions abroad (Figure 1). By extension, these programmes also contemplate the mobility of other groups, such as faculty (e.g. professors) and staff (e.g. administrators, technicians).

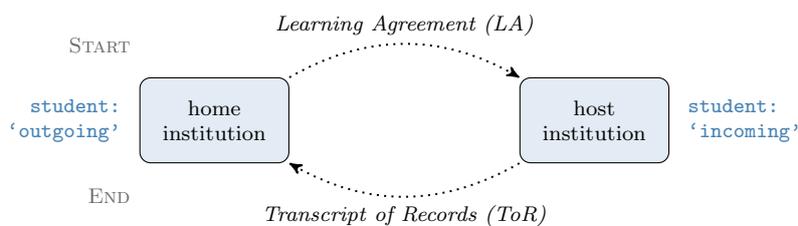


FIGURE 1 Academic mobility is formalised with documents such as the LA and the ToR

Networking across heterogeneous educational systems is a great challenge, and complexity is tackled by organisation through reference documents and procedural arrangements (e.g. Figures 4, 5, and 6). In fact, academic mobility relies on the refinement and clear communication of procedures, as well as on broad-minded participants — i.e. administrators, faculty, staff, and students.

The relevant legislation is typically expressed in text, whose convolutions are usually attenuated by the interpretation of mobility officers, international office staff, and degree delegates. However, to ensure uniformity in the interpretation, as the foundation for transparency and justice, the ‘rules’ of academic mobility should be expressed succinctly, understandably, and in shared media, such as suitable diagrams — for instance, of the Systems Planning Modelling Language, or SPML™ (Perdicoulis, 2014a).

2 Methodology

Academic mobility requires two complementary views: (a) communication pathways (e.g. ‘who talks with whom’), expressed with information flow diagrams (IFD), and (b) procedures (e.g. ‘who does what, when, and with whom’), expressed with extended process diagrams (EPD). Details on the *method* of the action (e.g. ‘how to do it’) are omitted as un-necessary and for keeping the diagrams simple, but may be added to the action nodes if or when needed.

Extended process diagrams (EPD) are customisable (Perdicoulis, 2010, 2013a,b, 2014b, 2015b). In the selected case of academic mobility (Erasmus+, website), the information on nodes and edges seems best accommodated in ‘triplets’, as illustrated in Figure 2. The conventions used in the custom EPDs are presented in Table 1, and are compatible with those of the IFDs — for instance, entities (e.g. people, institutions) are represented in a light blue background.

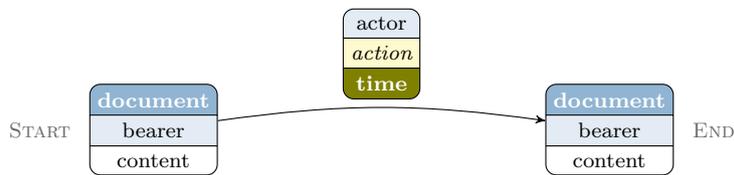


FIGURE 2 Sample of custom EPD with two ‘state nodes’ and a solid ‘action arrow’

The custom EPDs employ two types of arrows (Table 1): solid and dashed. Solid arrows (—→) are the most common, and provide the *de facto* description of the tasks. Dashed arrows (- - -→) represent uncertainty in the action (e.g. Figures 4, 5), commonly attributed to a decision (e.g. approval or rejection).

IFDs employ dotted arrows (⋯→), which represent information flows (e.g. Figure 3). These generic bi-directional communication pathways (e.g. between mobility officer and degree delegate, in Figure 3) are duly operationalised in the procedural diagrams — for instance, as solid arrows in Figure 6, detailing the actions.

DIAGRAM	ELEMENT	PART	SEMANTICS
EPD (Figs. 2, 4, 5, 6)	state node		document name/ ID
EPD (Figs. 2, 4, 5, 6)	state node		document content
EPD (Figs. 2, 4, 5, 6); IFD (Figs. 1, 3)	state/ action node entity/ person		document ‘bearer’ (state)/ ‘actor’ (action) process participant (e.g. student, delegate)
EPD (Figs. 2, 4, 5, 6)	action node		action
EPD (Figs. 2, 4, 5, 6)	action node		time (date, deadline, duration)
EPD (Figs. 2, 4, 5, 6)	solid arrow	—→	<i>de facto</i> / descriptive pathway
EPD (Figs. 2, 4, 5, 6)	dashed arrow	- - -→	predictive variant (e.g. probable pathway)
IFD (Figs. 1, 3)	dotted arrow	⋯→	information flow

TABLE 1 Summary of diagram properties for the selected case of academic mobility

3 Communication

The information flow diagram (IFD) of Figure 3 shows the bi-directional communications (Perdicoúlis, 2015a) between key stakeholders of academic mobility. The arrow pairs may be generalised in non-directional links, thus giving importance to the hierarchical levels; hence, the IFD can be abstracted into a hierarchical breakdown structure (HBS) diagram (Perdicoúlis, 2014a).

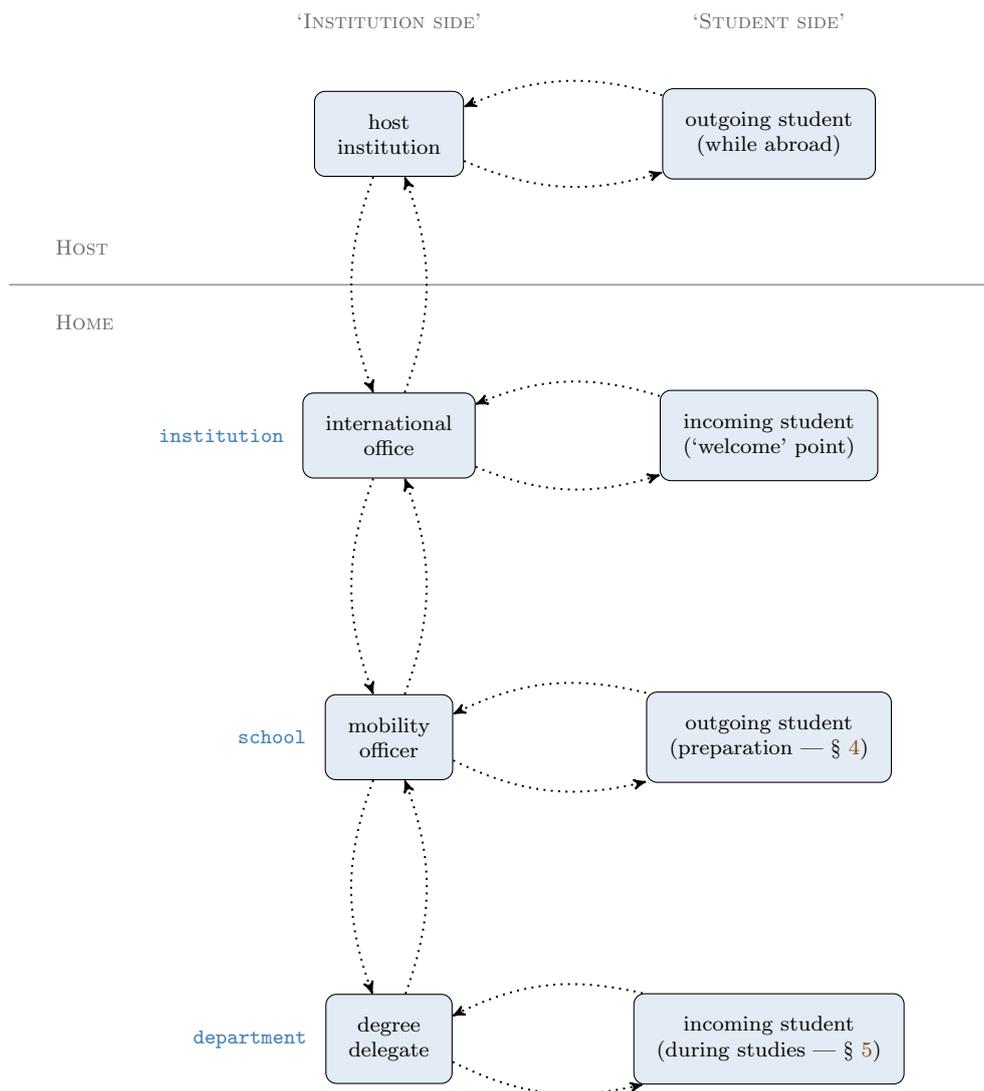


FIGURE 3 Communication between key stakeholders in academic mobility

Figure 3 is ‘home-centred’, as required for (a) the designation of ‘incoming’ and ‘outgoing’ students, and (b) the operational detail, as provided in the close-up view of its lower (home) part. Due to this ‘subjectivity’, the host institution at the top of Figure 3 appears in a remote (zoom out) view, or ‘overview’ — as Figure 1 does for both institutions.

4 ‘Outgoing’ student preparing to leave ‘home’

A sample preparation process for an ‘outgoing’ student to leave the ‘home’ institution is displayed in Figure 4. While the pathway is clearly defined, there is some uncertainty (dashed arrow and node) due to a decision that must be made along the process.

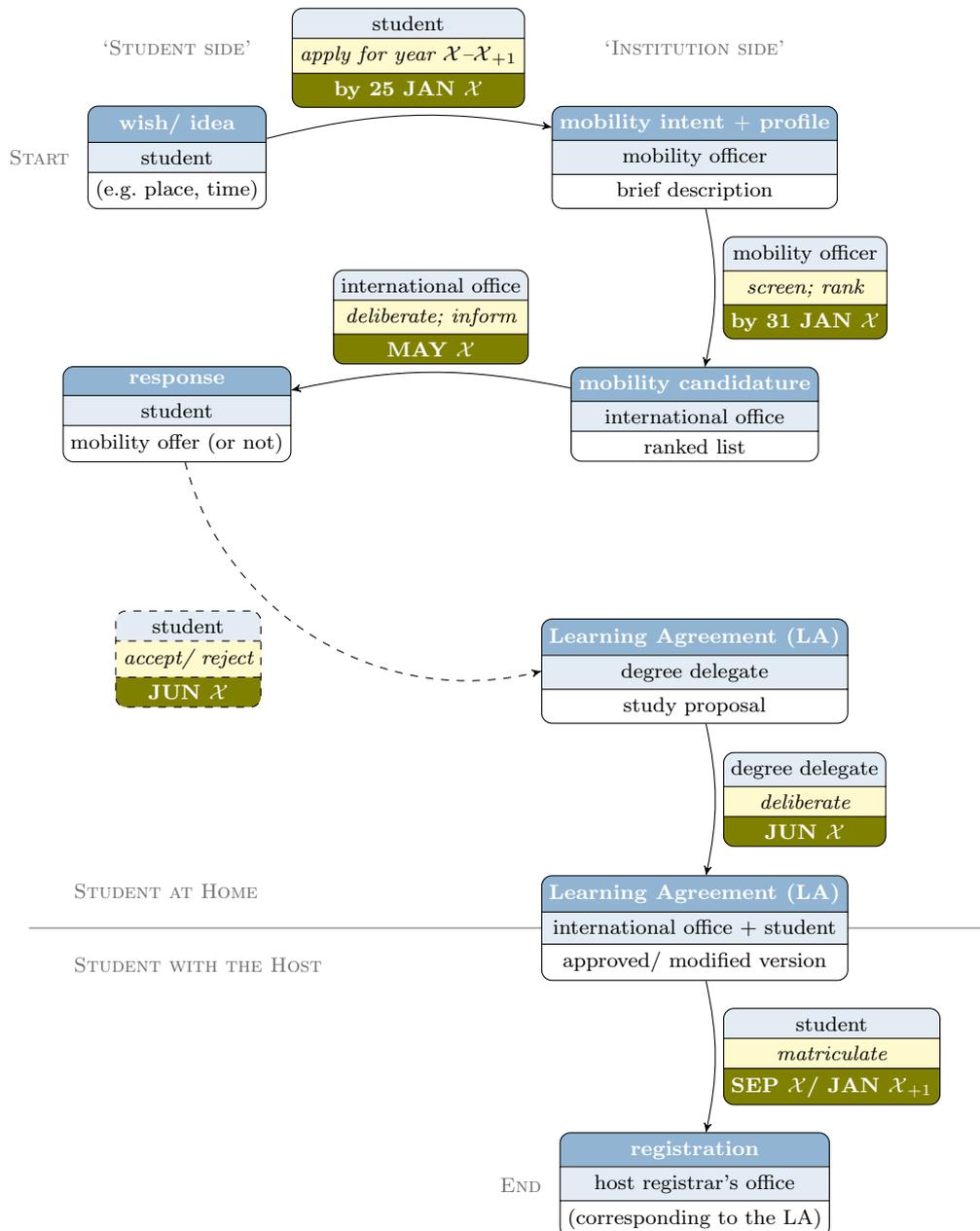


FIGURE 4 An ‘outgoing’ student must prepare to leave ‘home’ almost one year in advance

5 ‘Incoming’ student preparing to return ‘home’

A sample ‘repatriation’ process for an ‘incoming’ student leaving the ‘host’ institution is displayed in Figure 5. In this particular case, the registrar functions at the host are attributed to the school secretariat and the host international office.

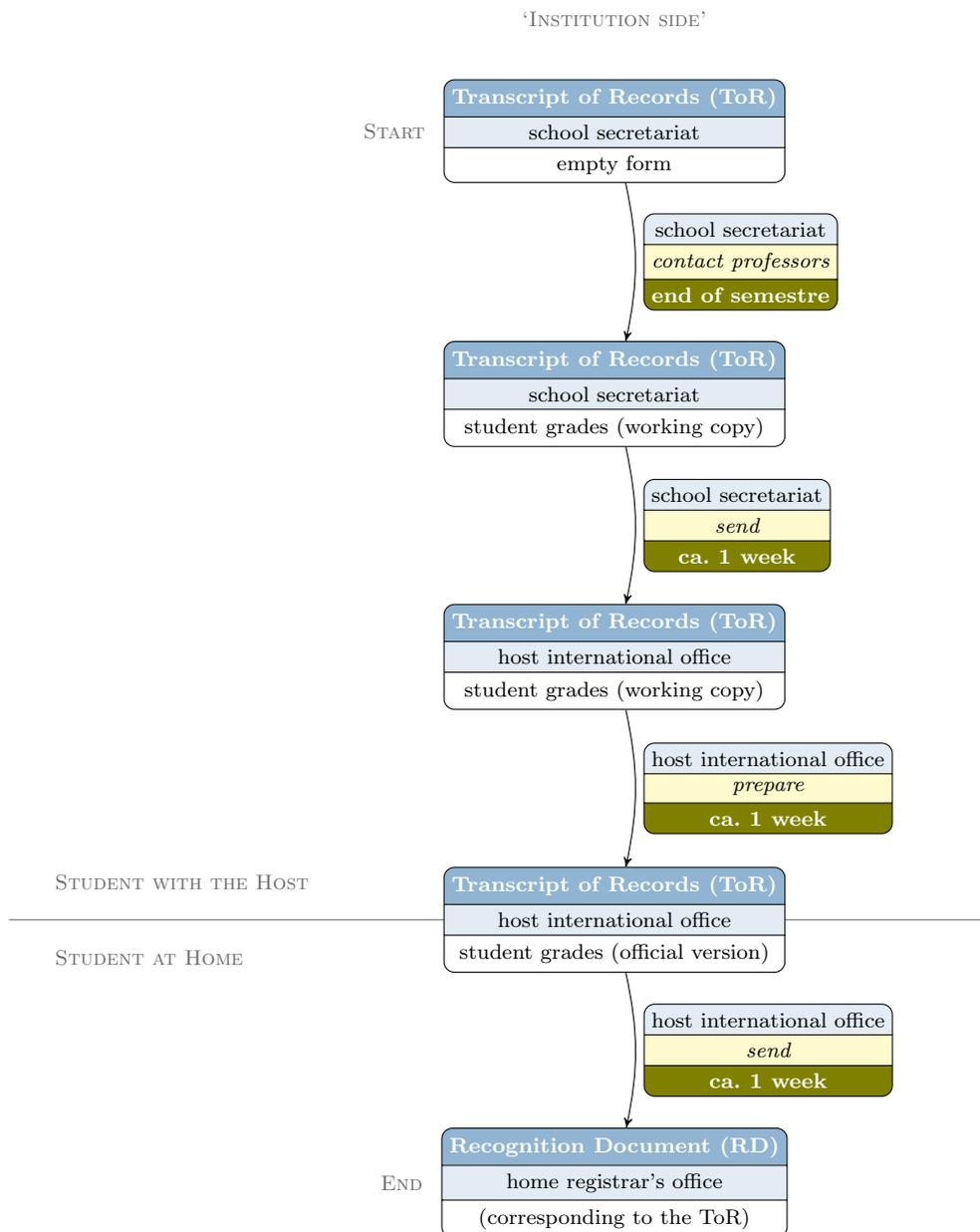


FIGURE 5 ‘Repatriation’ of an ‘outgoing’ student is a bureaucratic process

6 Learning Agreement (LA) processing

In order to be brought into effective action (i.e. deployed), the generic bi-directional communication pathways (e.g. between mobility officer and degree delegate) of the communication IFDs (e.g. Figure 3) must be given appropriate detail. In the selected case of academic mobility, this is satisfactorily achieved in a document-centred extended process diagram (Figure 6), with the action ‘triplets’ embedded in solid or dashed arrows, conveying the necessary executive details such as the identification of the document, the actor, and the corresponding time allotments.

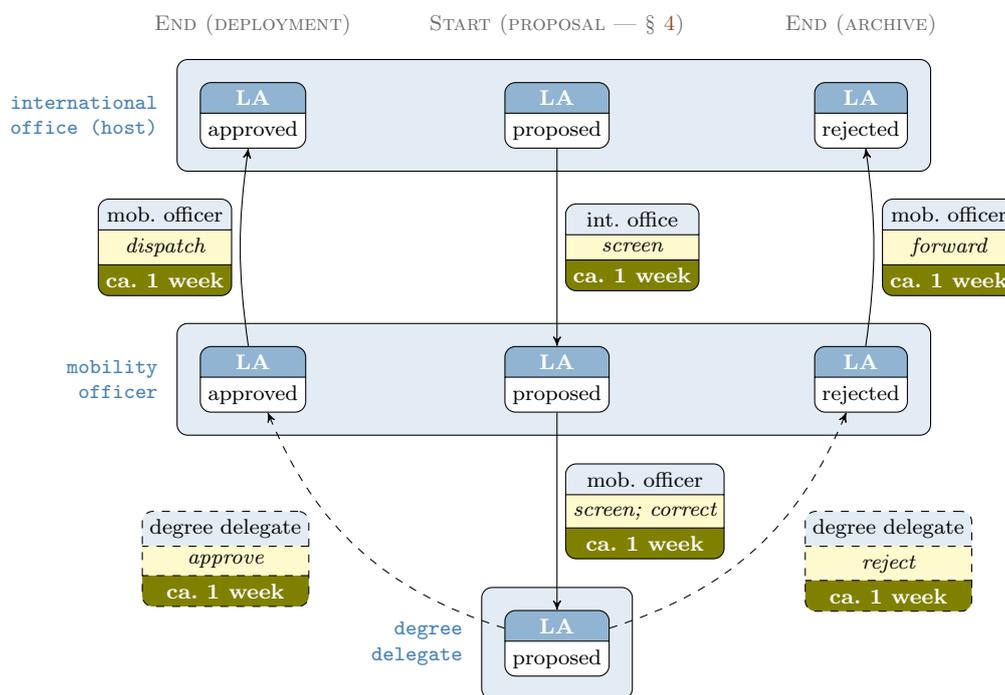


FIGURE 6 Processing a Learning Agreement (LA) entails considerable ‘backstage’ work

7 Discussion

The documentation of academic mobility through SPML™ can be achieved to a satisfactory degree with two types of diagrams: extended process diagrams (EPD) and information flow diagrams (IFD). These diagrams are fairly customisable (Perdicoulis, 2014a), so their aggregation levels may be adjusted to suit a variety of specific circumstances.

The construction of the diagrams entails the refinement and consolidation of the processes and communication protocols through verification and uniformisation, which suggests the value of the diagramming operation. Furthermore, the diagrams may be displayed and shared, thus elevating the understanding and execution efficiency of the academic mobility from the point of view of students, faculty, and staff.

8 Conclusion

The preparation of special diagrams for academic mobility processes and communication protocols is a worthwhile investment, which returns value in the form of — *inter alia* — understanding, refinement, transparency, and smooth operation. Next steps are the implementation per case, further refinement, and feedback from the experience.

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