Towards an Integrated Product and Process Modelling: 
oEPC Markup Language (oEPML) for object-oriented 
Event-driven Process Chains (oEPC)

Frank Hogrebe¹, Markus Nüttgens¹, Heiko Kern², Stefan Kühne²

¹ University of Hamburg, Information Systems
Von-Melle-Park 9, D-20146 Hamburg, Germany
{frank.hogrebe, markus.nuettgens}@wiso.uni-hamburg.de

² University of Leipzig, Business Information Systems
Johannisgasse 26, D-04103 Leipzig, Germany
{kern, kuehne}@informatik.uni-leipzig.de

The responsibilities for products and processes are usually split between the organisational, IT or financial divisions. Connections and interdependencies are consequently often only insufficiently recognised. Integrated product and process models (IPP) are a highly promising approach to counter these deficits. Split responsibilities are the norm in public administrations due to the traditional division of work. With a view to the EU Services Directive, these are called upon to realign their product and process organisation by the end of 2009. Important core requirements of the directive are the setting up of single points of contact for companies and the electronic handling of formalities and processes for the setting up and carrying out of a service activity. This has direct effects on the design of the underlying information systems and the IT infrastructure, particularly in relation to the e-Government services of public administrations.

Based on an IPP framework, we describe a modelling approach that aims at an Integrated Product and Process Model for the public administration on the basis of object-oriented Event-driven Process Chains (oEPC) and UML class diagrams. We demonstrate the approach on the business case “business registration” and describe a prototypical implementation based on the modelling tool bflow* Toolbox.