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## MODELING OF NAVAL PROPULSION – APPROACH BASED ON HYBRID SYSTEMS

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**Abstract.** *This paper proposes a model for a full electric naval propulsion system using object-oriented differential predicate transition Petri nets (OO-DPT). This approach encompasses discrete events characteristics as well as the continuous values. To formulate this model, it was adopted the Production Flow Schema methodology in order to describe the system behavior and its main components and equipment. And after, using OO-DPT Petri Nets, a hybrid systems approach, it is possible to build a comprehensive model.*

**Keywords:** *naval propulsion, hybrid systems, Petri Nets, Objected-oriented Differential Predicate Transition Petri Nets*

### 1. INTRODUCTION

Since last decade, brazilian government has (Brasil, 2013)

### 2. NAVAL PROPULSION DESCRIPTION

To write something here.

### 3. MODEL

Based on description provided by in section 2,

### 4. RESULTS

To write something here too.

Brasil, 2013. “Política Nacional de Defesa, a Estratégia Nacional de Defesa e o Livro Branco de Defesa Nacional”. *Diário Oficial da União - Seção 1 - 26/9/2013, Página 1, p. 155.* URL [http://www.defesa.gov.br/arquivos/estado\\_e\\_defesa/END-PND\\_Optimized.pdf](http://www.defesa.gov.br/arquivos/estado_e_defesa/END-PND_Optimized.pdf).