





€2.5 million



PROTESTS
property
based
ing

PROperty

```
prop_sms_packing() ->  
  ?FORALL(Msg,  
    list(choose(0,127)),  
    unpack(pack(Msg)) == Msg)
```

TESTing

```
5> eqc:qu
```

```
.....
```

```
.....
```

```
After 74
```

```
[69,59,14,67
```

```
Shrinking.....(7 times)
```

```
[0,0,0,0,0,0,0,0]
```

```
false
```

A minimal message
that does not unpack
correctly

A message that
does not unpack
correctly

Where Do Properties Come From?

Existing Specifications Existing Test Suites

BUSINESS CONCEPTS

A Shipping Order has:
ShippingId
Origin
Destination
Order

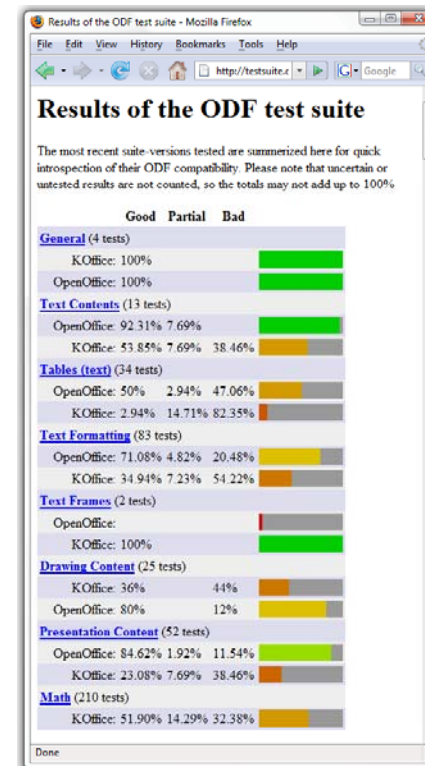
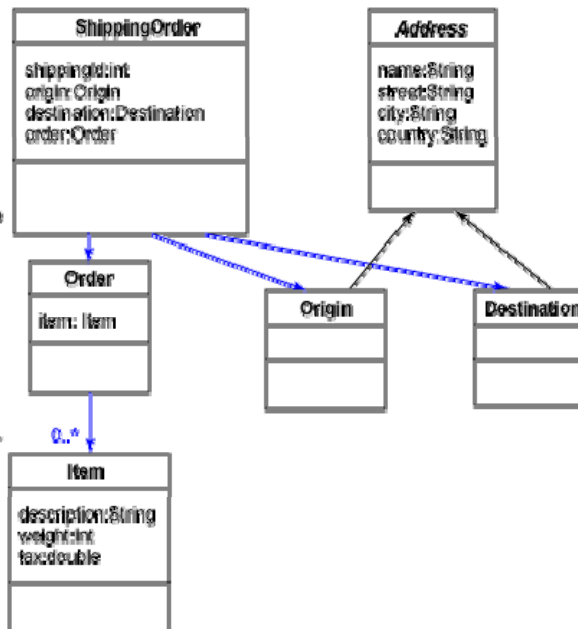
Origin and Destination are
both of type Address

An Address has:
Name
Street
City
Country

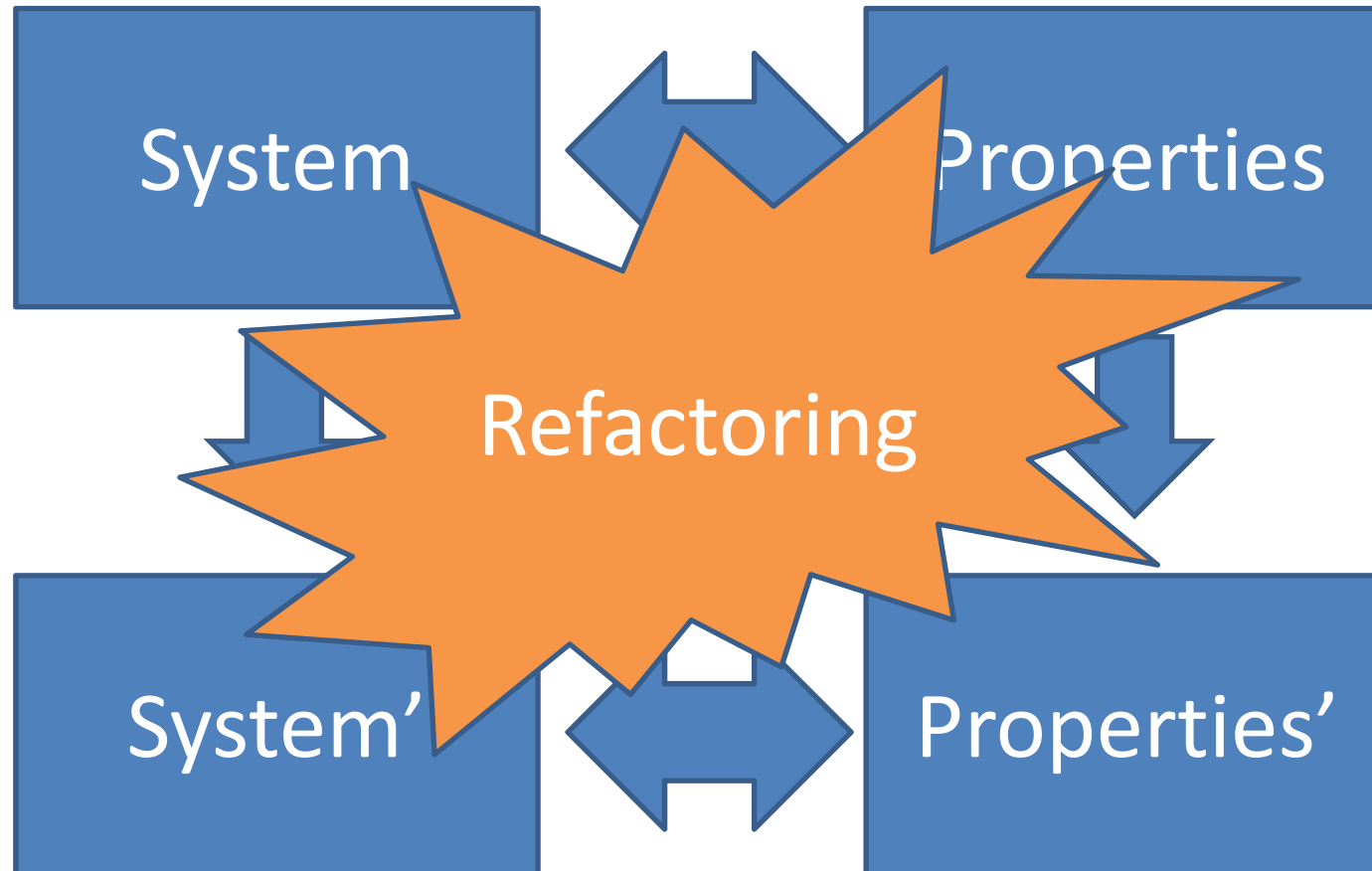
An Order consists of one or
more Items

Each Item has
Description
Weight
Tax

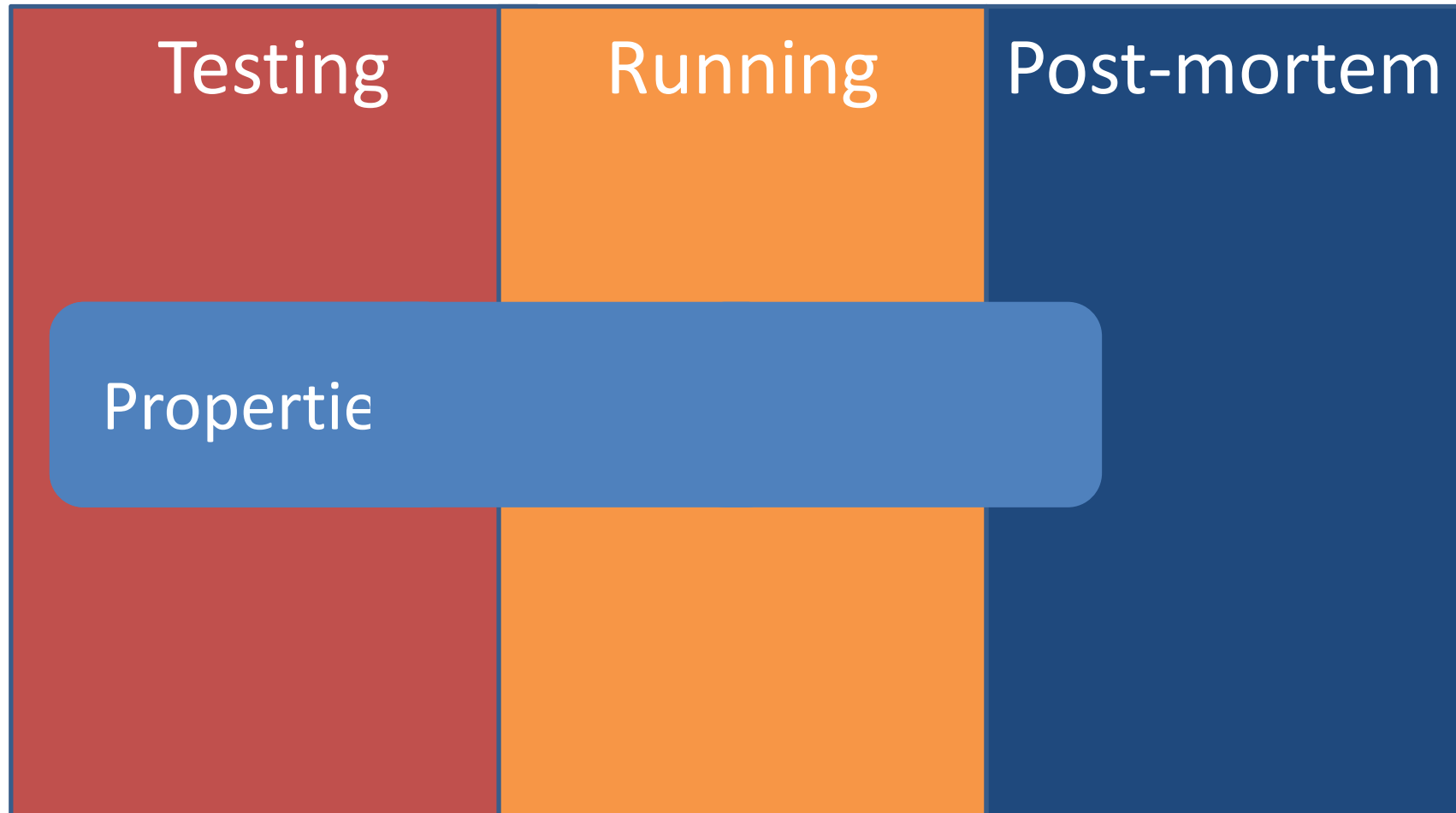
UML DIAGRAM



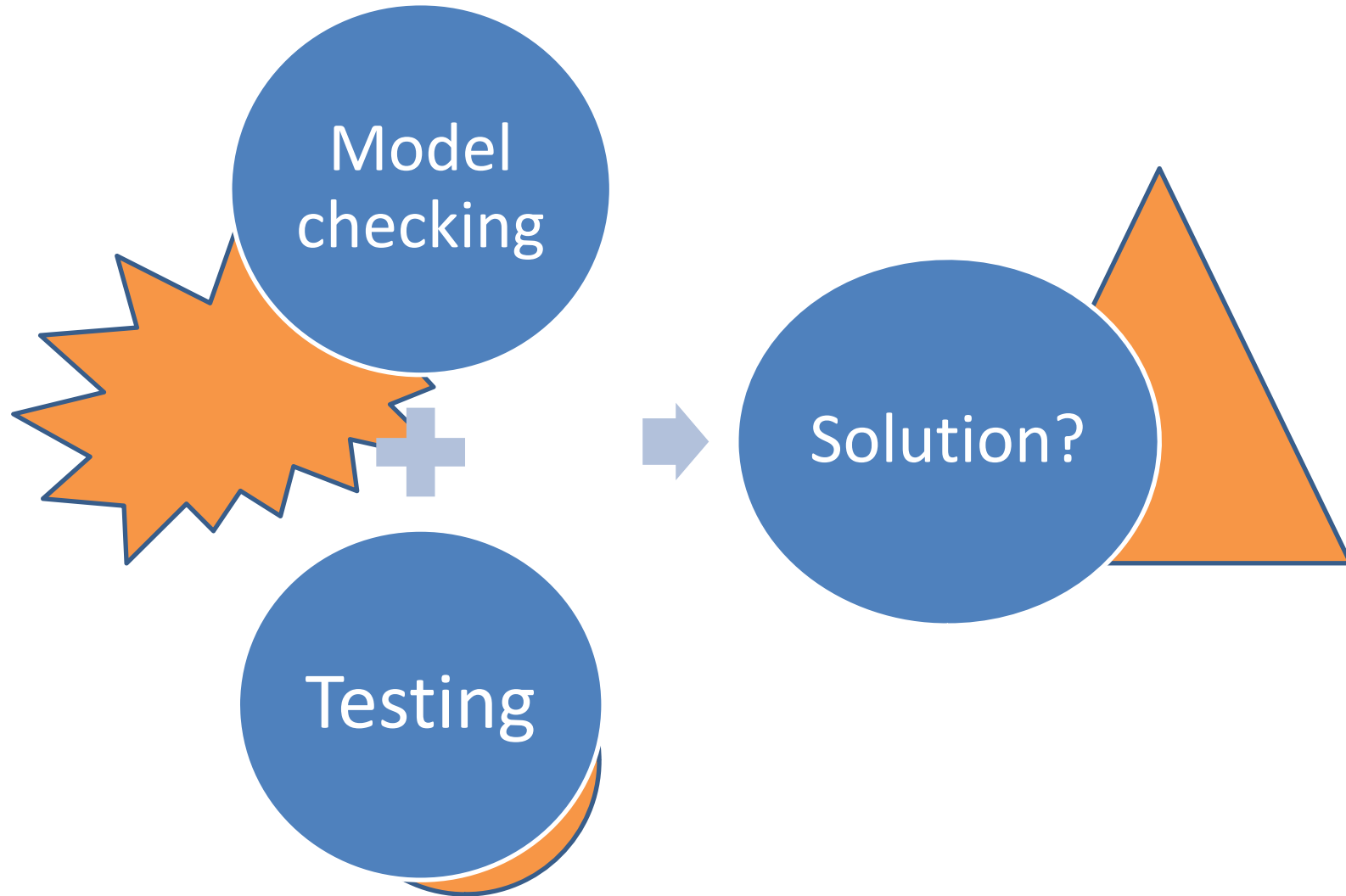
How Do Properties Evolve?



Can We Do More With Properties?



What About Concurrency?



Ratings

...in "Service and Software Engineering"

Science



Mgmt



Impact



Who are we?



Who are we?

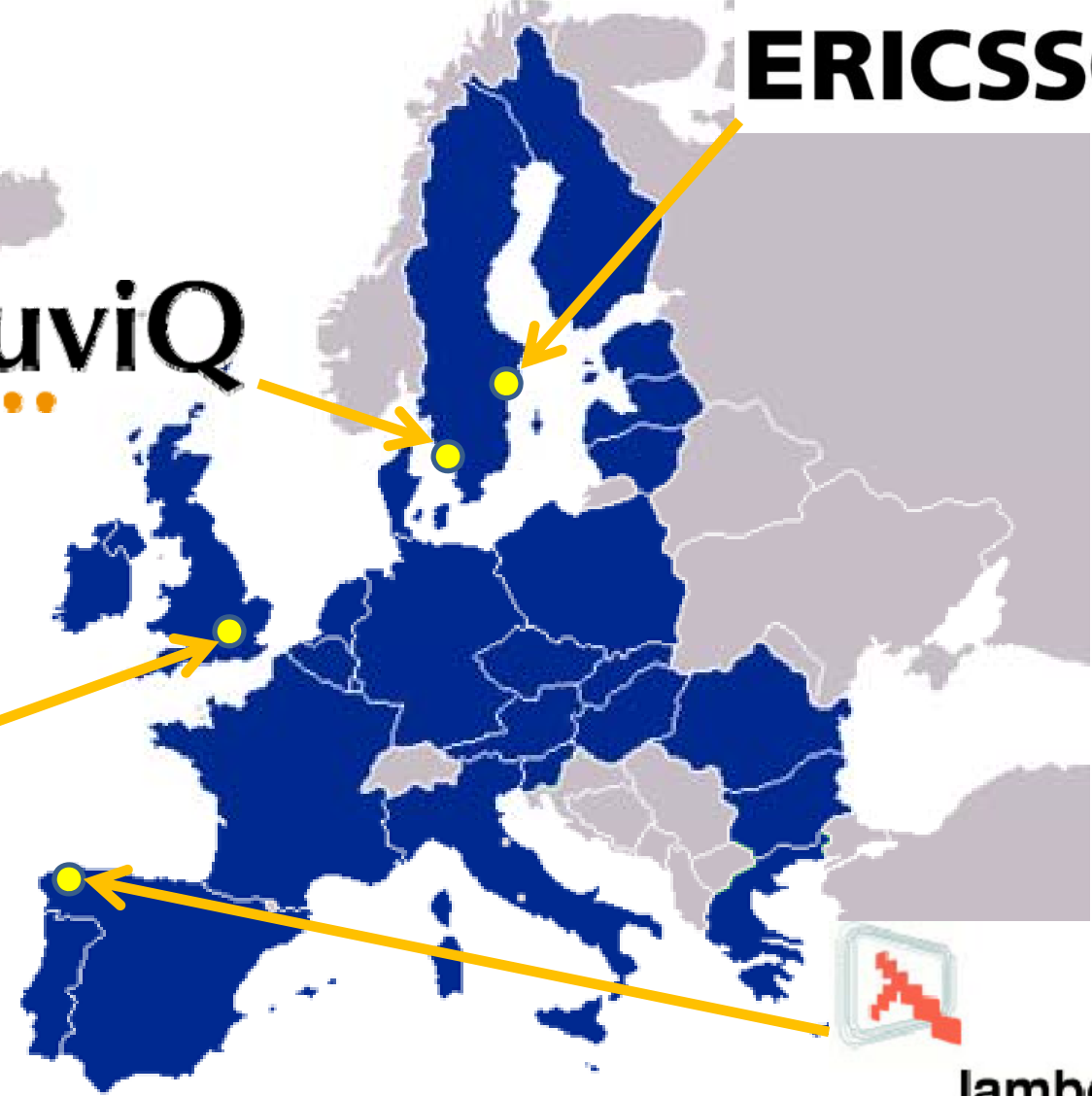
ERICSSON



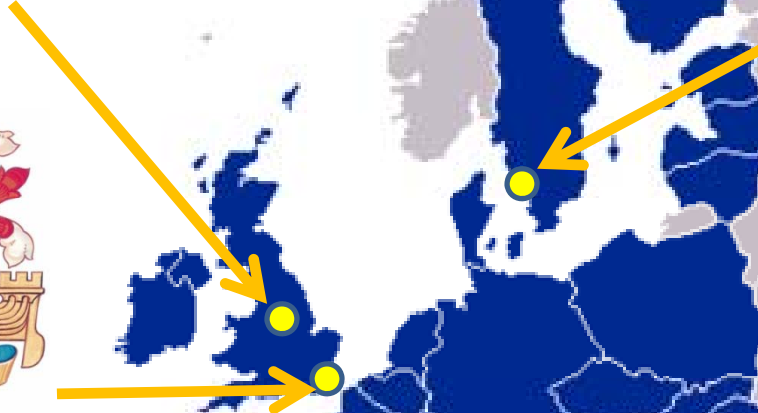
QuviQ



lambdastream



Who are we?



UNIVERSITY OF KENT



IT-universitetet
i Göteborg

CHALMERS | GÖTEBORGS UNIVERSITET



