

Application of United Nations Framework Classification to Hydrocarbons in Norway

By

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Outline

- **The petroleum classification system in Norway**
- **The petroleum resources in Norway**
- **The UNFC for petroleum**
- **The UNFC for petroleum applied on National level**
- **The UNFC applied on deposit level (the Gullfaks Field)**



The Norwegian petroleum resources classification system



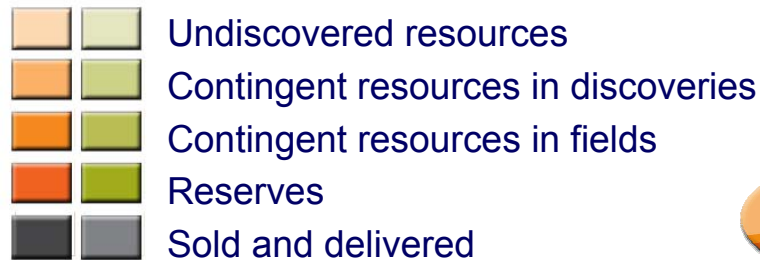
		RESOURCE CLASS	PROJECT STATUS CATEGORY		
		Sold and delivered petroleum	0	Sold and delivered	
TOTAL PETROLEUM-INITIALLY-IN-PLACE	DISCOVERED PETROLEUM-INITIALLY-IN-PLACE COMMERCIAL	RESERVES	1	In Production	LOWER RISK ↑
			2A/F	Approved Development Plan	
			3A/F	Decided recovery	
			4A/F	In planning	
	DISCOVERED PETROLEUM-INITIALLY-IN-PLACE SUB-COMMERCIAL	CONTINGENT RESOURCES	5A/F	Unclassified	PROJECT MATURITY ↑
			6	Not very likely	
			7A/F	Not evaluated	
			UNRECOVERABLE		
	UNDISCOVERED PETROLEUM-INITIALLY-IN-PLACE	PROSPECTIVE RESOURCES	8	Prospect	HIGHER RISK ↑
			9	Lead	
UNRECOVERABLE					
		UNRECOVERABLE			
		← RANGE OF UNCERTAINTY →			

Based upon the SPE/WPC/AAPG system

Introducing the Project Status Categories



The geographical distribution of petroleum resources offshore Norway

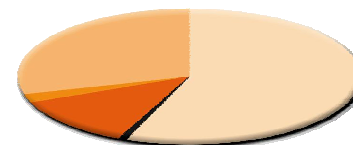
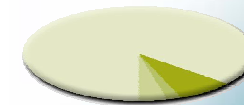


851 bill Sm³

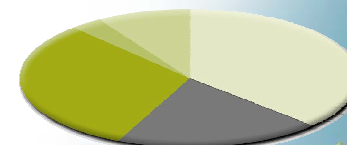


Barents Sea

359 mill Sm³

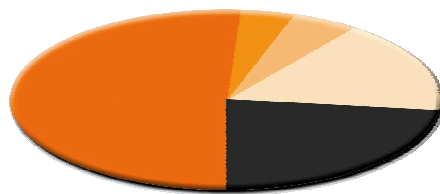


2 282 bill Sm³

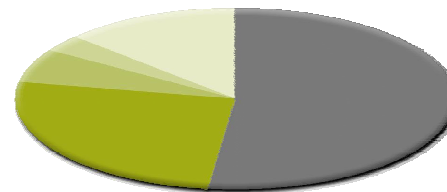


1 312 mill Sm³

Norwegian Sea



3 339 bill Sm³



4 700 mill Sm³

North Sea

Recoverable gas

6 972 mrd Sm³

500 bill Sm³ gas from future measures for improved recovery is included

Recoverable oil, NGL and condensate

6 771 mill Sm³

400 mill Sm³ oil from future measures for improved oil recovery is included



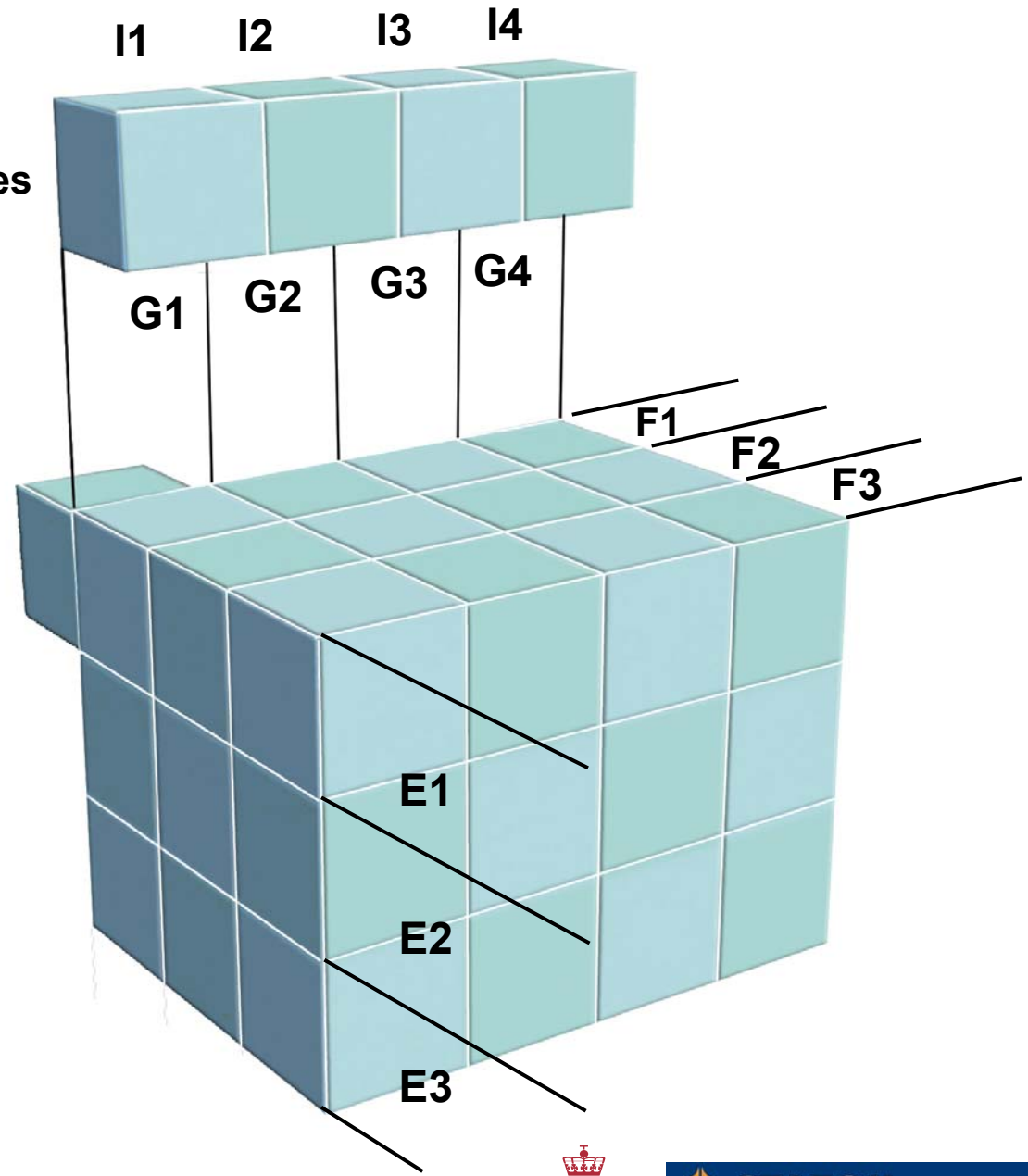
Total petroleum resources on the Norwegian Continental Shelf as of 31 December 2002

Resource Class	Category	Project status categories		Oil equivalents ¹⁾ mill Sm ³
Historic production	0	Fields	Sold and delivered as of 31.12.02	3517
Reserves	1		Remaining reserves in production	2695
	2-3		Reserves with approved / submitted PDO	1082
			Sum reserves	3776
Contingent resources	4		Planning phase	369
	5		May be developed in long term	133
	7F		New discoveries being evaluated	2
			Sum contingent resources in fields	504
			Sum reserves and contingent resources in fields	4281
	Discoveries		4	Planning phase
		5	May be developed in long term	433
7F		New discoveries being evaluated	6	
		Sum contingent resources in discoveries	1115	
	7A	Possible future measures to increase the recovery factor	900	
Undiscovered resources	8-9	Undiscovered resources		3930
	As of 31.12.02	Sum		13743
		Remaining resources		10226



UNFC for petroleum

In place quantities



E1: Commercial

E2: Contingent commercial

E3: Not commercial

F1: Committed projects

F2: Contingent projects

F3: Exploration projects

G1: Proven geology

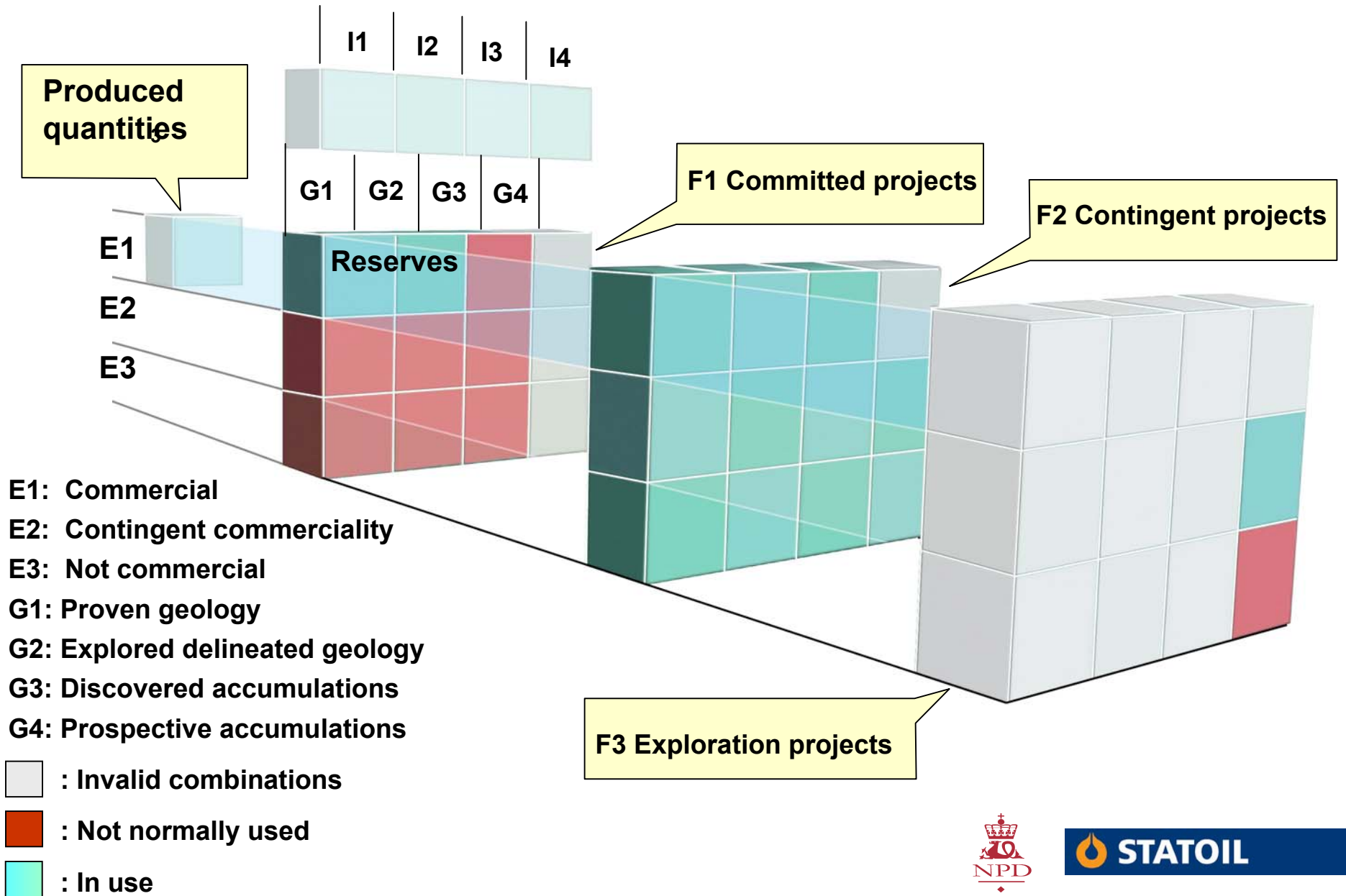
G2: Explored & deliniated geology

G3: Discovered accumulations

G4: Prospective accumulations



UNFC for petroleum



Total petroleum resources on the Norwegian Continental Shelf as of 31 December 2002

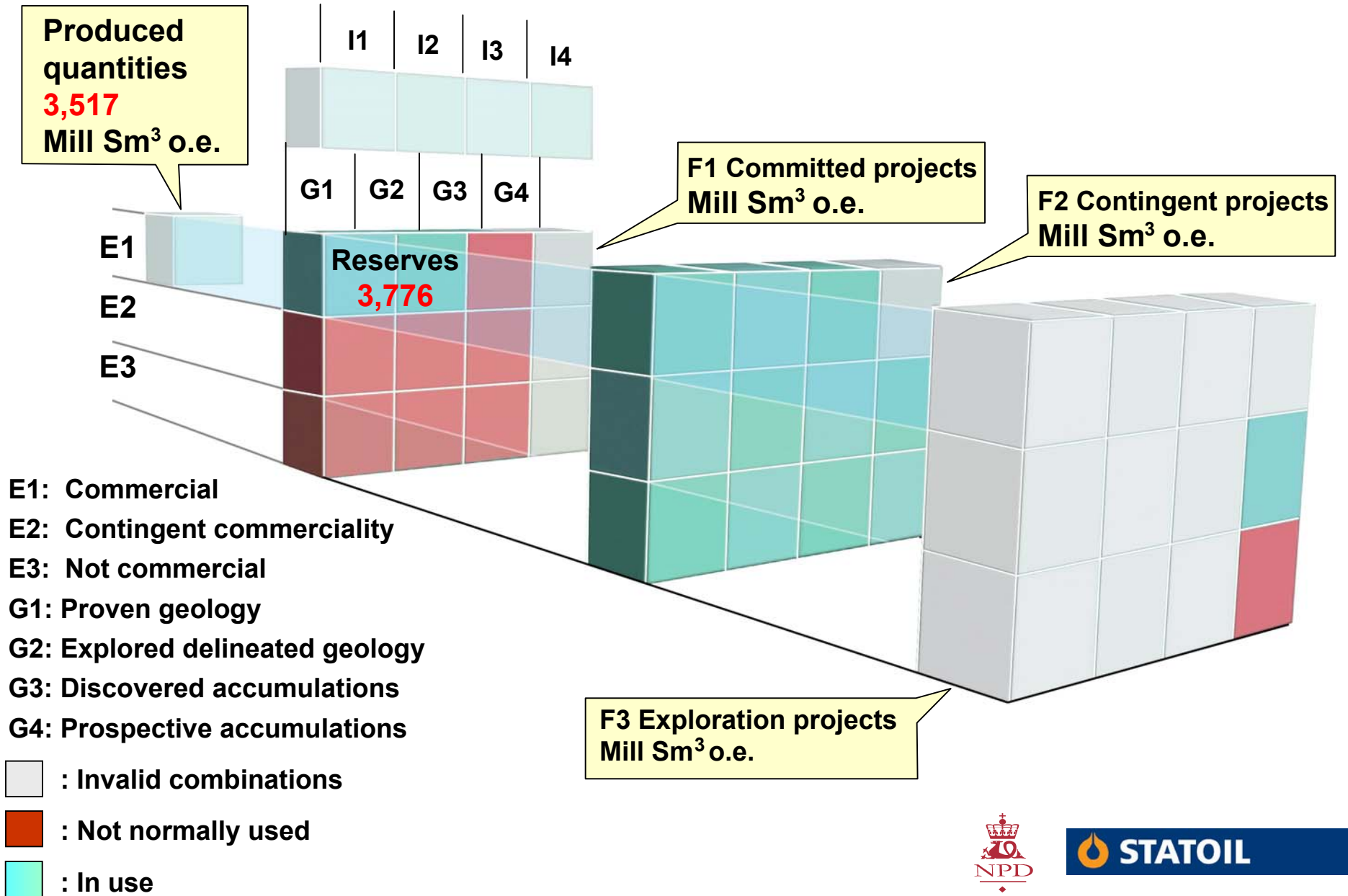
Resource Class	Category	Project status categories		Oil equivalents ¹⁾ mill Sm ³		
Historic production	0	Fields	Sold and delivered as of 31.12.02	3517		
Reserves	1		Remaining reserves in production	2695		
	2-3		Reserves with approved / submitted PDO	1082		
			Sum reserves	3776		
Contingent resources	4		Planning phase	369		
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	7F		New discoveries being evaluated	2		
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	4		5	7F	Discoveries	Planning phase
		May be developed in long term				433
		New discoveries being evaluated				6
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Undiscovered resources	8-9	Undiscovered resources		3930		
As of 31.12.02	Sum		13743			
	Remaining resources		10226			

produced

1.1.1. / 1.1.2.



UNFC for petroleum in Norway



Total petroleum resources on the Norwegian Continental Shelf as of 31 December 2002

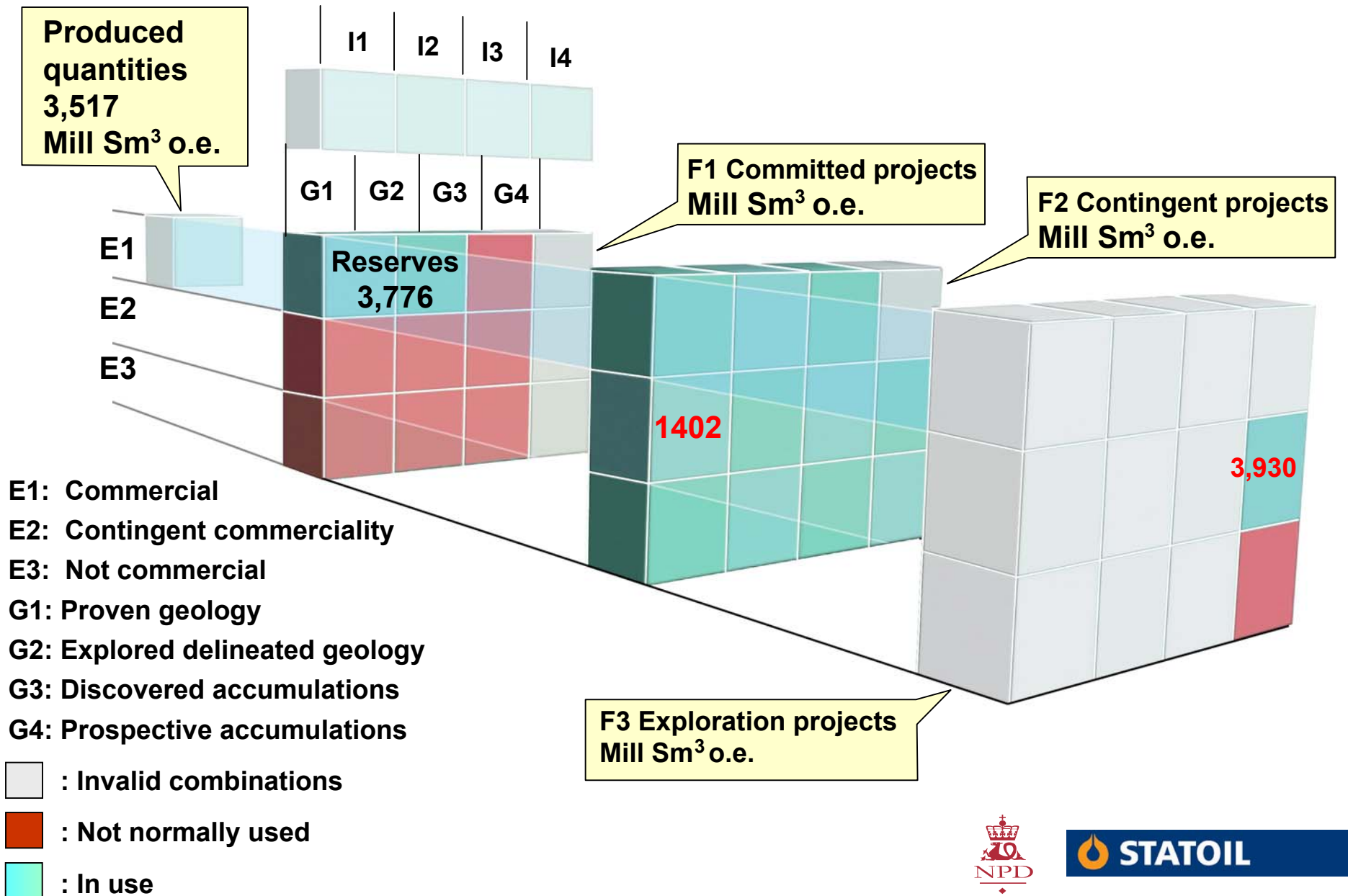
Resource Class	Category	Project status categories		Oil equivalents ¹⁾ mill Sm ³
Historic production	0		Sold and delivered as of 31.12.02	3517
Reserves	1	Fields	Remaining reserves in production	2695
	2-3		Reserves with approved / submitted PDO	1082
			Sum reserver	3776
Contingent resources	4		Planning phase	369
	5		May be developed in long term	133
	7F		New discoveries being evaluated	2
		Sum contingent resources in fields	504	
		Sum reserves and contingent resources in fields	4281	
Contingent resources	4	Discoveries	Planning phase	676
	5		May be developed in long term	433
	7F		New discoveries being evaluated	6
			Sum contingent resources in discoveries	1115
	7A	Possible future measures to increase the recovery factor	900	
Undiscovered resources	8-9	Undiscovered resources		3930
As of 31.12.02		Sum		13743
		Remaining resources		10226

2.2.1.

2.3.4.



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Total petroleum resources on the Norwegian Continental Shelf as of 31 December 2002

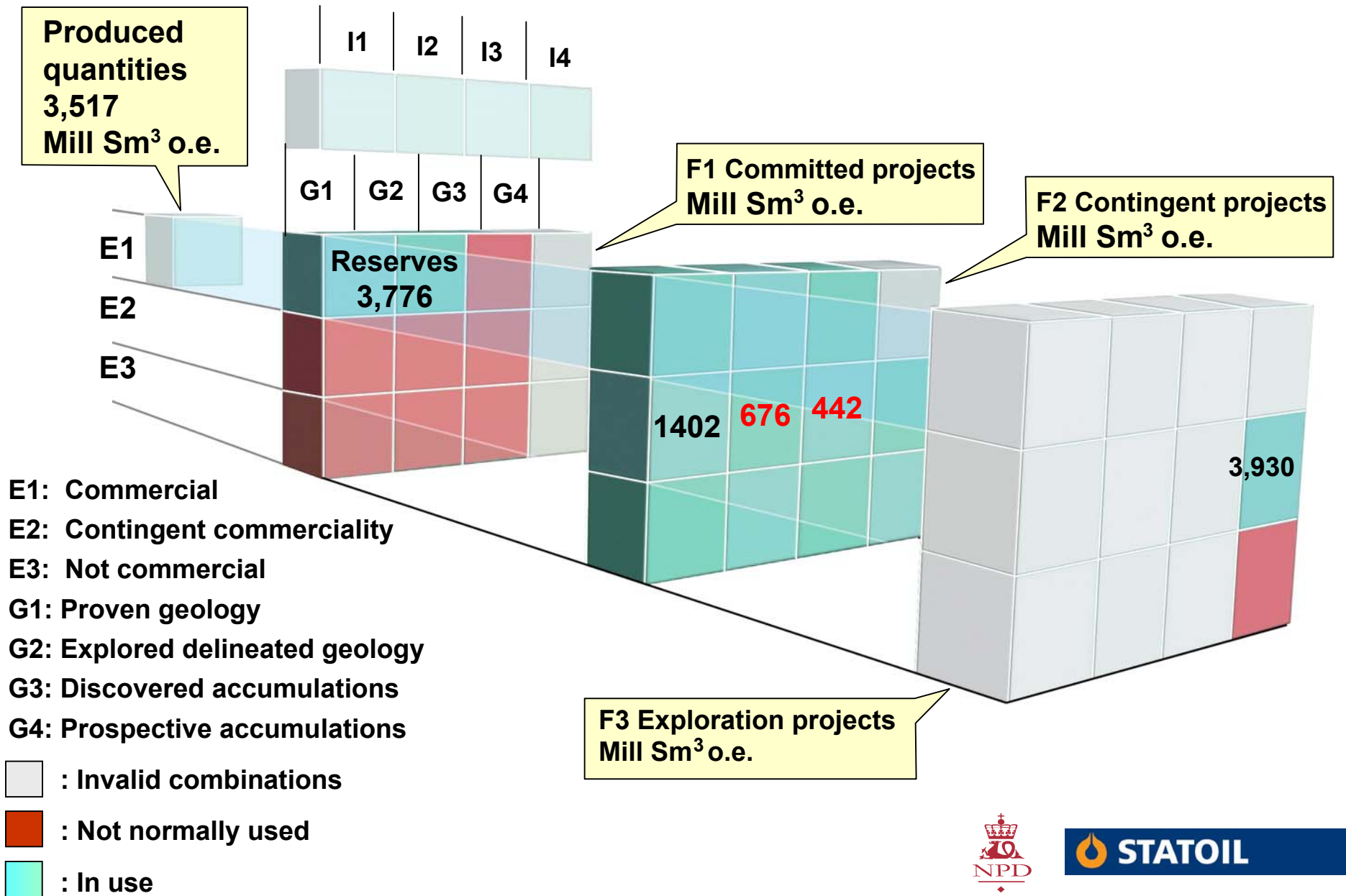
Resource Class	Category	Project status categories		Oil equivalents ¹⁾ mill Sm ³
Historic production	0		Sold and delivered as of 31.12.02	3517
Reserves	1	Fields	Remaining reserves in production	2695
	2-3		Reserves with approved / submitted PDO	1082
			Sum reserver	3776
Contingent resources	4		Planning phase	369
	5	May be developed in long term	133	
	7F	New discoveries being evaluated	2	
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		Sum reserves and contingent resources in fields	4281	
Contingent resources	4	Discoveries	Planning phase	676
	5		May be developed in long term	433
	7F		New discoveries being evaluated	6
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Undiscovered resources	8-9	Undiscovered resources		3930
	As of 31.12.02	Sum		13743
		Remaining resources		10226

2.2.2.

2.2.3.



UNFC for petroleum in Norway



UNFC for petroleum in Norway

