



A Standard European Tank? Technology Transfer and the Quest since 1945 for a Joint International Main Battle Tank within Europe and NATO

The Mark VIII

Anglo-American heavy tank, 1918

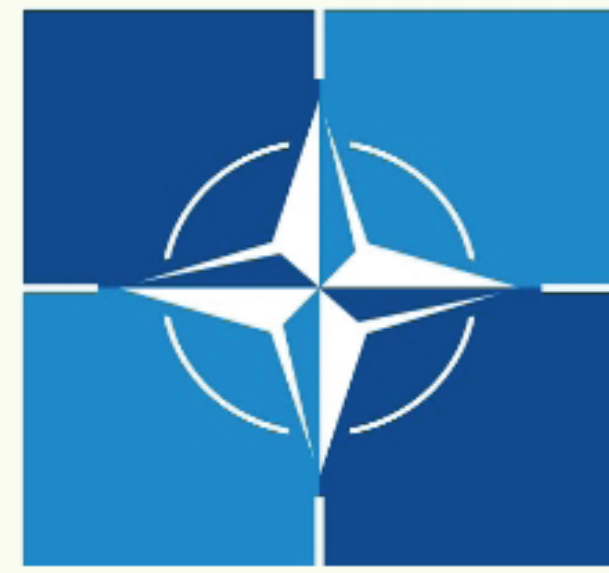
As yet, the only example of successful international collaboration in new tank design.



Image <http://www.tankmuseum.org/museum-online/vehicles/object-e1949-363>

Benefits of Collaboration

(Theoretical)



Political

- Strengthens political ties with project partners.
- Affirms commitment to alliance.



Image <http://www.lbtimes.com/amid-russia-tensions-nato-preps-massive-military-drill-spain-2058906>

Military

- Improved rationalisation, standardisation and interoperability, leading to better integration and more efficient logistics.



Image <http://kingsisamaru.com/wp-content/uploads/安保法案と日経平均株価.png>

Economic

- Lower development and production costs.
- Economies of scale for unit cost.



Image <http://america.aljazeera.com/multimedia/2015/2/kharkiv-tank-factory.html>

Industrial

- Technology transfer leading to cross-pollination of expertise.
- Shared production.



Image taken from Tank Encyclopedia website, <http://www.tanks-encyclopedia.com/coldwar/West_Germany/German_Cold_War_tanks.php>

1957 'Standard-Panzer'

Franco-German project initiated by the FINABEL committee to produce a common tank design for Europe.

Failed due to a difference of opinion in design philosophy married to rivalry over potential future exports.

1963 MBT-70/KPz 70

US-German project initiated by US SecDef, McNamara.

Failed due to differing design philosophy and excessive use of untested technology which led to cost and schedule over-runs.



Image taken from Peach Mountain website, <http://www.peachmountain.com/5star/tanks_MBT70_tank.aspx>



1971 Future Main Battle Tank (FMBT)/KPz 3

Anglo-German project initiated by UK SecDef, Lord Carrington.

Failed due to differing design philosophy plus disagreement over main gun, leading to schedule over-runs.

1977 Tank 90/'Napoleon'

Franco-German project initiated by French *Ministère de la Défense*.

Failed due to unequal technical experience, design philosophies plus conflicts over potential exports.



Obstacles to Collaboration

(Potential)



Image <https://qph.ec.quoracdn.net/main-qimg-cc5dc61d25e94e407fb333a60108dec1>

Different National Design Philosophies

- Mobility versus protection.
- How should tank be armed?

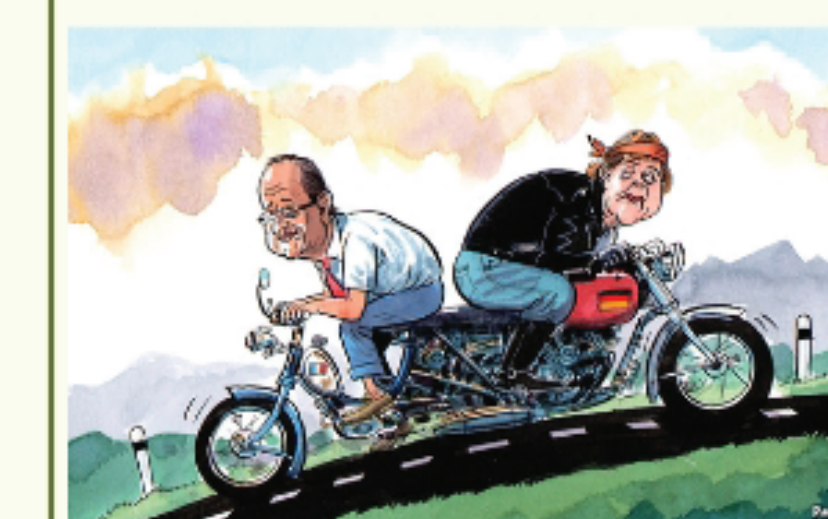


Image <https://www.economist.com/news/europe/21577100-european-union-fretting-over-widening-gulf-between-two-partners-have-always>

Unequal Partnership

- Invitation to invest in project but little opportunity to influence the final design.



Image <https://www.kimballstock.com/pix/WLD/13/WLD-13-KH0021-01P.JPG>

Too Equal a Partnership

- Competition for dominance in key project areas.
- National expectation.



Image <http://bigthink.com/ideafeed/setting-deadlines-for-now-can-help-you-finish-projects-on-time>

Different Timescales and Priority

- Immediate In Service Date rather than future replacement.
- Sole option or one of many?

Implications for the Future

- Main battle tanks remain a core weapon in modern armies.
- National design philosophies within NATO tank-building countries are gradually converging.
- Modern MBTs are increasingly sophisticated and expensive.