**GER30 UK-Time Strategy**

This document defines the strategy in modular sections, including UK-time conversion with daylight savings, ready for MQL4 implementation. Please provide an outline of how sections of code (with English comments so I can understand the code)

Sessions x 2:

Session 1: 8am-1230pm

Session 2: 1430pm-1716pm

Track opening price and apply open, high/low and retraction levels e.g. Open 7615, High 7655, Low 7605, Retraction 50. These data points may change throughout the session. Track until close of session.

Session 1 Active Trading Zones (minimum entry distance from open price start of session). Trades can only be opened If within the below listed zones for each respective session. Use closing logic to close in

816-905 (opening zone)-931 (hard close if not closed by closing rule (min distance from session open price 45 points either side if up place sell if down place buy always this, trade placed opposite side of the trade). No other closing rule applied to this trade just hard close 931am

930-945 (45): 09:30–09:45 is zone trades can open hard close any trade open in this zone 10:06am if still open at this time.

1015-1045 (70): 1015-1045 is the zone trades can be openedHard close 12:31pm if still open and not closed by other means.

1045-1145-1231 (45) 10:45–11:45 is the zone trades can be opened. Hard close 12:31pm if still open and not closed by other means.

Session 2 Active Trading Zones

1446-1506 (45) is the zone trade can be opened. Hard close 17:16pm if still open and not closed by any other means.

1515-1545 (70) is the zone trade can be opened. Hard close 17:16pm if still open and not closed by any other means.

1545-1648 (45) is the zone trade can be opened. Hard close 17:16pm if still open and not closed by any other means.

Retraction Level (entry price adjustments)

15-29.9 points (18 beyond current high low for session)

30-35.9 points (next level – see Levels) eg if price entry is to 60 move to next level at 70

36-45.9 points (skip next level e.g. if 45 was next level and retracted 37 points since start of session then new entry point is 100 from open price start of session).

46+ points (cancel all future trades for session if none open, if a trade already open still use close logic to close. No new trades if 46+ retraction happens and no trades are open)

Tolerance 9 points:

* This means if a trade reaches active trading zone for either session and the high/low has already exceed entry level if within 9 points of breaching the level the trade can still be placed. If breached 9.1+points then trade set for the entry next level. When calculating this retractions must also be considered e.g 8.16am 45 point level reached breach by 7 points in downward direction and then moved up 29 points. Logic is breach of 45 level within tolerance by retraction as was 52 from open but retraction was 29 points so trade entry point recalculation needed. New entry point for trade is to be placed at 70 points from opening session price and have levels and closing logic for this 70 point from open session price level applied (details on this placed in entry Levels and Closing Logic section below. Tolerance should not be for both sides only extends to further away from entry price 16076 min +9 to 16085 NOT +/- allowing for a closer distance from session open price ie 16697. This is same for all entry levels.

Entry Levels and Trade Closing Logic: Has distance from open price of session

45-69.9 if moves 15 points against close at 0. If open close 16th min from peak high/low.

70-99.9 If open close 31st min from peak from peak high/low.

100-129.9 If open close 31st min from peak from peak high/low.

130-159.9 If open close 31st min from peak from peak high/low.

Sweeps: Close any open trades in situations described below

160 points from open session sweep every 1 min. Close any open trades as no trades should be open 160+ points from open session price.

1716-0759 check every 1 min. Close any open trades as no trades should be open within this time zone.

1231-1429 check every 1 min. Close any open trades as no trades should be open within this time zone.

No Trading Sessions - Volatility

If from 1716-8am following day market moves 200 points. No trades session 1 as too volatile. If last session 2 was on Friday then 1716 until Monday 8am cannot be 200+ move in market over weekend.

If from 12pm to 14:30pm market moves 150 points. No trades session 2 as too volatile.

General Logic to check when placing trades (may be a repeat of above)

Check if in active trading zone

Min 45 point entry either side opening session price.

If has moved 46 from opening session price. Opposite side cannot be traded again until next session. This is a retraction from opposite side.

1 trade open per session at a time only.

Look for break of tolerance and calculate open price consider tolerance and retraction when calculating new entry price.

Check High and Low of session when considering the entry price and reactions from high and low of session.

Trades placed in opposite direction of above description e.g. 45 below open price is place a buy trade. If 45 above place a sell trade. Always opposite direction.

Check session not cancelled due to volatility (see above).

Bet size is always what is in the IG account / 800. So trade sizes increase with wins and decrease with losses. Always a pot of 800 points. If not enough money for minimum bet, no trades placed.

Answers to additional points to clarify strategy:

1. **Session-time handling**
   * MT4 hosted in London where this ea run. Use uk time only
2. **Session data collection**
   * Capturing Open/High/Low “live” for each session—do you want to reset these on the very first tick after the session start? Yes, the high/low data should track from beginning to end of session and reset. But, for trade volatility needs to track 1716pm to 8am next trading day (could be over weekend if 1716pm occurs on a Friday) for session 1 (200+ points move cancels trades for subsequent session 1. Session 2 is 12pm to 1430pm (150+ points move cancels session 2).
   * How should we store those (globals, a struct/array per session)? Please advise on this. I intend to use a Virtual Server. I don’t have set plan yet for a virtual server but will accommodate your strategy.
3. **Active-Trading Zones**
   * You’ve listed precise entry windows (e.g. 8:16–8:45, 9:30–9:45, etc.). Should these be hard-coded, or parameterized (so you can tweak without recompiling)? Would be a great to be able to do this via a .txt file. Or even give line numbers in the code where I can adjust, Same for retraction levels and closing mins e.g start 16th, 31st minutes
   * Confirm whether times like “45” in parentheses mean the width of the zone in minutes (e.g. 8:16–9:01 is 45 min)? : 45 is points from the open min distance from session open price for that that active trading zone. Some zones are 45 points away either side (need adjusting for breachs/tolerances and retractions) Others 70 points also need to be adjusted.
4. **Retraction-level logic**
   * Retractions (15–29 pts → 18 beyond H/L; 30–35 pts → next level; 36–45 pts → skip a level, etc.) are a bit intricate. Would you prefer a table/array of {minRetract, maxRetract, levelsToSkip}? Yes use this solution of table arrays.
   * How exactly do you want “points” defined on GER30 (i.e. does 1pt = 1 index point)? Yes 1 point exactly 1.1 points is over. All points in this brief are index points eg 40 mt4 is in broker points so would be 400 needs to be applied thoughout this brief
5. **Tolerance**
   * The ±9 pts buffer: is that always static, or should it too be a user-input? User input adjustable via .txt file or line reference in code.
6. **Entry & Exit rules**
   * For each entry level (45, 70, 100, 130), you have different “time‐to-close” rules (0 min vs. 16 min vs. 31 min). Can you confirm:
     + Level 45 → close after 0 min against (i.e. immediately on a 15 pt adverse move)? Not 0 minute, 0 balance if trades move adversely 15pts and returns to open level close the trade for 0 balance. Recalculate retraction, breach, tolerance and place next trade if opportunity occurs. This may be next level or level below that, skip a level or cancel trades for the session (see levels section). This is the most complex piece of logic.
     + Levels 70/100/130 → close after 31 min from peak? Yes close start 31st minute from the high/low (use opposite to direction of trade. If a buy use the low, if a sell use the high).
7. **Sweeps & Volatility filters**
   * The “150 pts sweep” and “no-trade” windows (17:16–07:59, 12:31–14:29) – do you want these checked on each tick, or via an OnTimer() every 1 min? Every 1 minute will be fine.
   * Volatility blocks (200 pts overnight, 150 pts midday) – shall we store the last session’s end price and compare on the first tick of the subsequent session? Yes this is a perfect solution.
8. **General settings**
   * One trade per session: shall we block further entries once OrdersHistoryTotal() or an in-session flag indicates an entry? Yes
   * Symbol is always GER30 for LIVE and GER30(£) DEMO. Use GER30(£) as will test on DEMO and later change to live after testing.
9. **General Logic check**  
   can you confirm the error free script 1. monitors session open price. 2. checks for active timezone. 3. monitors high/low from session start. 4. if active timezone checks for breach and tolerance level 4a if breach tolerance recalculates entry price based on breach or retraction level if no breach place trade. 5. close 45 trade if goes 15 against if not close 16th minute. 6. if 70+ entry level close start 31st minute. So if moves 15 points against on a trade below 70 points away from open i.e 45-69.9 and moves returns to open price of trade close for 0 profit/loss. If doesnt return to 0 close the trade with a 40 point stop loss. Every trade needs a 40 point stop loss (this is urgent amend). No trade can be opened without a 40 point stop loss (if the level stop loss it not available trade fails to open. If trade does not go 15 points against and moves favorably close start 16th minute away from the high/low of the trade opposite direction e.g. if a buy 16th minute from low of trade and if sell 16th minute since high of the trade  
   entry trade levels should be peak opposite direction since the trade opened because the tolerance rule and retracement rules should ensure that no trade is opened in the session that has breached tolerance levels or retracted to a level that would require a new entry level calculation so the entry point should be within tolerance of the level or adjusted according to the retracement rules. can you check this logic exists? but only resets if new high low reached during the trade else uses the previous high low. 16th and 31st minute is from the opposite peak high/low of of the session or trade if a new high/low reached during the trade
10. **Dynamic Spreads: Spreads should be adjusted according to the time:**GER40 (DAX) Typical Spreads on IG MT4 Time (CET) Typical Spread (Points) 01:15–08:00 4.0 08:00–09:00 2.0 09:00–17:30 1.2 17:30–22:00 2.0 22:00–01:15 5.0
11. Open and Close trades if fail to execute should retry 5 times
12. When trade entry prices calculated and checked for tolerance breach for the level and retractions to calculate new prices the greater of the 2 should be applied. Example if a tolerance is breached and next level 70 should be entry point and this is further away from session price than the retraction calculation which results in 56 from open session price as new entry point select the price furthest away from session open price ie 70. Also a recursive calculation is needed to ensure that no further breach of tolerance of the current level ie 70 have occurred before trade time i.e. has not been breached by tolerance of 9 points. Nor has another retraction occurred both of which would require new entry points calculated and furthest away selected. This is recursive until no further breaches of tolerance have occurred and no other retractions need to recalculate new entry price.

Closure Rules:

Close at breakeven if the price moves 15 points against the trade (to 15065) and returns to 15050. correct

Otherwise, close after 16 minutes from the peak low (lowest price since trade open). there is an exception to this closure rule for the 816 to 931am zone. if the trade go 15 against close at 931am.

if trade was opened 70 or more from session open price just close at 931am (doesn't matter if moves 15 points against the trade just close 931am ie the 15 adverse move and close for break even only applies for trades opened 45-69.9 from session open price not trades opened 70-139 (last level is 130+9 tolerance.

only the 816-905 active trading zone close at 931am. all other active trading zones close 16th minute (from the high or low since trade opened) for trades opened 45-69.9 from session open price and 31st minute (from the high or low since the trade opened 70-139 from session open price. also the sweep close should be 179 not one 160 as last entry is 130 from session open price plus 9 tolerance so last entry point is 139 with 40 stop loss = 179

when there is a retraction prior or during a active timezone (before a trade is placed) a new entry price should be calculated. this calculation can be first done anytime during a session and becomes the minimum entry point for next trade. if another retraction before trade opened a new entry point is calculated if needed it also checks for tolerances and breaches of 9 point tolerances and sets next level if needed. will need to have 2 possible entry prices for breaches, assigning next level if needed and a retraction entry point price. it chooses the price furerest away from session open price to make the decision and places the trade opposite direction with a 40 point stop loss and then applies the necessary closing rule once trade is running

i want to add 2 variations to the strategy but keep the orginal as it (these are adds so that will get 3 sets of results.)

i want the 3 sets results in the log files with all the indeividual trades complete for all 3 strategies. At the top of the log file i want a summary of trades by strategy by year same as shows in cmd line when run but for all 3 straegies

1. Original w/ -15 breakeven 816 and all: This is the strategy as it is currently

2. Original w/o -15 breakeven 816 and w/non816 trades: This is the strategy as it is currently but removes requirement to close the 45-69.9 trade opened in 816 zone to close if goes -15 at breakeven just run to 931am

3. Original w/o -15 breakeven 816 and w/o\_non816 trades: This is the strategy as it is currently but removes requirement to close the 45-69.9 trade opened in 816 zone to close if goes -15 at breakeven just run to 931am. Also removes requirement of any trade opened 45-69.9 from session open price to close at breakeven if goes 15 points against. Just close at start 16th minute.

If i run multiyear 2000-2025 for example create a seperate multiyear log summarizing total pips by year and month same as what appears in cmd line currently. add months and total pips accross the range of years eg jan is 2000-2025 total pips in all jans cumulated. so has total for the years individually and all the months cumulated. also create this data in a well formatted excel spreadsheet i can open to view the results. do this for the individual log files also

**Overview of the Three Strategies**

1. **Strategy #1 (Original)**
   * Full existing logic, including the 45–69.9 “-15 adverse => break-even” rule **in all time zones**, including the **08:16–09:05** zone.
2. **Strategy #2 (No -15 B/E for 08:16 zone)**
   * Identical to Strategy #1 **except** the earliest zone (08:16–09:05) does **not** close at break-even if it goes 15 points adverse.
   * The other zones still do the 45–69.9 break-even if the trade returns to near entry after being 15 points adverse.
3. **Strategy #3 (No -15 B/E for 08:16 zone, and no -15 B/E for *any* 45–69.9)**
   * Same as Strategy #1, except **none** of the 45–69.9 trades anywhere use the 15‐adverse break‐even rule.
   * They simply close at the 16th minute from the last beneficial peak (or forced close, or SL).

You can run **one** pass over the CSV data, evaluating all three strategies in parallel. Each trade outcome is stored under the strategy that created it.

**Summary & Logging Requirements**

* **Single log file** that contains:
  1. **Top-of-File Summaries**: Totals by year (and if multi-year, also a month breakdown) for **each** strategy.
  2. **All trades** listed for all three strategies.
* **If multi-year** (e.g., --year\_range 2000-2025), the script also:
  1. Writes a **separate summary** that includes monthly aggregated pips across the entire range (e.g., all Januaries combined, all Februaries, etc.).
  2. Generates an **Excel spreadsheet** (e.g., “results.xlsx”) with the same aggregated data by strategy, year, and month.

need to add 4th strategy No15BE\_AfterEarliestZone this is can have close for 0 if goes -15 and back to 0 in 816 zone only but not in any zone after 45-69.9 trades all close start 16th minute after 815am zone. for all staregies if closes breakeven can reopen new trade at new calculated entry price. all other aspects of staegy same as other 3 for this 4th strategy. but once closed can open new trade if new entry prce caluclation is reached? this is whenever closed for 0 this applies. is one trade per session at a time not one and done