

Case Study 2: Stratos's First Top-Up Tax Allocation

Introduction

This case study brings together the concepts from Chapters 2.1 to 2.4. You will complete a full Top-Up Tax allocation for Stratos Group plc, working through the GloBE Calculator tool (GIR-001) and then applying the IIR and UTPR allocation methodologies.

Important: This case study requires you to work through the complete calculation chain—from raw financial data to final Top-Up Tax allocation. Do not skip steps.

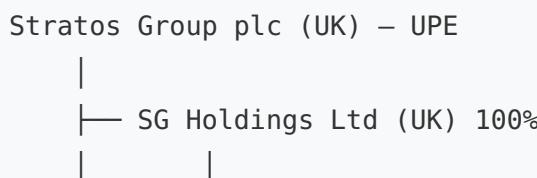
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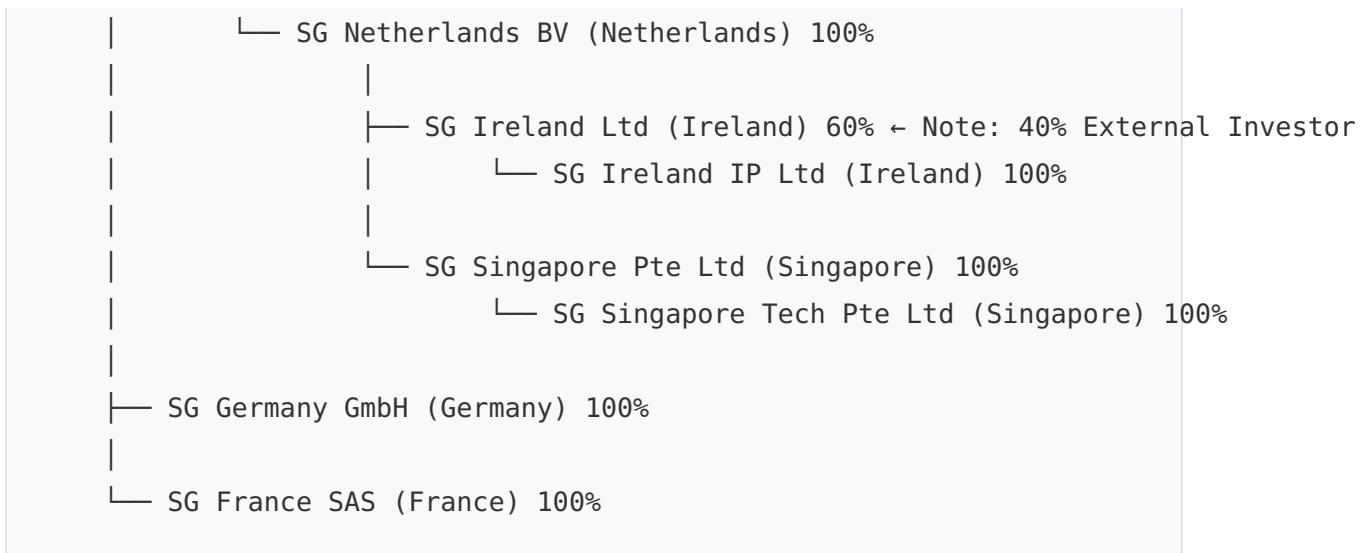
Background: Stratos Group – FY 2025

Stratos Group plc has completed its first year subject to the GloBE Rules. The tax team has gathered financial and tax data from all jurisdictions and must now:

1. Calculate ETR for each jurisdiction
2. Determine which jurisdictions are low-taxed ($ETR < 15\%$)
3. Calculate Top-Up Tax for low-taxed jurisdictions
4. Allocate Top-Up Tax under IIR or UTPR

Relevant Ownership Structure





Qualified IIR/UTPR Status (FY 2025)

Jurisdiction	Qualified IIR?	Qualified UTPR?
UK	Yes	Yes
Netherlands	Yes	Yes
Germany	Yes	Yes
France	Yes	Yes
Ireland	Yes (QDMTT only)	No
Singapore	No	No

Task 1: ETR Calculation (GIR-001 Step 1)

Data Provided

The following data has been extracted from Stratos's accounting and tax systems for FY 2025.

Singapore Jurisdictional Data

Entity	GloBE Income (€)	GloBE Loss (€)	Adjusted Covered Taxes (€)
SG Singapore Pte Ltd	12,500,000	—	1,562,500
SG Singapore Tech Pte Ltd	4,800,000	—	600,000
Singapore Total	17,300,000	—	2,162,500

Ireland Jurisdictional Data

Entity	GloBE Income (€)	GloBE Loss (€)	Adjusted Covered Taxes (€)
SG Ireland Ltd	5,200,000	—	650,000
SG Ireland IP Ltd	2,100,000	—	262,500
Ireland Total	7,300,000	—	912,500

Other Jurisdictions (for reference)

Jurisdiction	Net GloBE Income (€)	Adjusted Covered Taxes (€)	ETR
UK	45,600,000	10,944,000	24.0%
Netherlands	8,400,000	2,100,000	25.0%
Germany	22,300,000	6,690,000	30.0%
France	15,800,000	3,950,000	25.0%

Your Task

Using the data above, calculate the Effective Tax Rate for Singapore and Ireland.

GIR-001 Step 1: ETR Calculation

The ETR formula is:

$$\text{ETR} = \text{Adjusted Covered Taxes} \div \text{Net GloBE Income}$$

Where Net GloBE Income = Total GloBE Income – Total GloBE Losses for the jurisdiction (Article 5.1.2)

Expected Deliverable

Complete the ETR calculation for each low-tax jurisdiction:

Singapore ETR Calculation

Item	Formula	Your Answer
A. Total GloBE Income	Sum of all Singapore entities	€
B. Total GloBE Losses	Sum of losses (if any)	€
C. Net GloBE Income	A – B	€
D. Adjusted Covered Taxes	Sum of Singapore covered taxes	€
E. ETR	D ÷ C (round to 4 decimal places)	%
F. Low-taxed?	ETR < 15%?	Yes / No

Ireland ETR Calculation

Item	Formula	Your Answer
A. Total GloBE Income	Sum of all Ireland entities	€
B. Total GloBE Losses	Sum of losses (if any)	€
C. Net GloBE Income	A – B	€
D. Adjusted Covered Taxes	Sum of Ireland covered taxes	€
E. ETR	D ÷ C (round to 4 decimal places)	%
F. Low-taxed?	ETR < 15%?	Yes / No

Task 2: SBIE Calculation (GIR-001 Step 2)

Data Provided

Singapore Substance Data (FY 2025)

Entity	Eligible Employees	Eligible Payroll Costs (€)	Tangible Assets NBV (€)
SG Singapore Pte Ltd	85	6,200,000	4,500,000
SG Singapore Tech Pte Ltd	120	8,400,000	12,800,000
Singapore Total	205	14,600,000	17,300,000

Ireland Substance Data (FY 2025)

Entity	Eligible Employees	Eligible Payroll Costs (€)	Tangible Assets NBV (€)
SG Ireland Ltd	45	3,800,000	2,200,000
SG Ireland IP Ltd	12	1,400,000	850,000
Ireland Total	57	5,200,000	3,050,000

SBIE Transition Rates for FY 2025 (Article 9.1)

Carve-Out	Rate
Payroll	9.8%
Tangible Assets	7.8%

Your Task

Calculate the Substance-Based Income Exclusion for Singapore and Ireland using the FY 2025 transition rates.

GIR-001 Step 2: SBIE Calculation

The SBIE formula is:

$$\text{SBIE} = (\text{Eligible Payroll Costs} \times \text{Payroll Rate}) + (\text{Tangible Assets NBV} \times \text{Asset Rate})$$

Expected Deliverable

Singapore SBIE Calculation

Item	Formula	Your Answer
A. Eligible Payroll Costs	From data provided	€

Item	Formula	Your Answer
B. Payroll Rate (FY 2025)	From transition table	%
C. Payroll Carve-Out	$A \times B$	€
D. Tangible Assets NBV	From data provided	€
E. Asset Rate (FY 2025)	From transition table	%
F. Asset Carve-Out	$D \times E$	€
G. Total SBIE	C + F	€

Ireland SBIE Calculation

Item	Formula	Your Answer
A. Eligible Payroll Costs	From data provided	€
B. Payroll Rate (FY 2025)	From transition table	%
C. Payroll Carve-Out	$A \times B$	€
D. Tangible Assets NBV	From data provided	€
E. Asset Rate (FY 2025)	From transition table	%
F. Asset Carve-Out	$D \times E$	€
G. Total SBIE	C + F	€

Task 3: Top-Up Tax Calculation (GIR-001

Step 3)

Data Provided

Use your answers from Tasks 1 and 2, plus the following additional information:

QDMTT Status

Jurisdiction	Has QDMTT?	QDMTT Amount Paid (€)
Singapore	No	—
Ireland	Yes	480,000

Your Task

Calculate the Jurisdictional Top-Up Tax for Singapore and Ireland.

GIR-001 Step 3: Top-Up Tax Calculation

The Top-Up Tax formula is:

$$\text{Top-Up Tax Percentage} = 15\% - \text{ETR} \quad (\text{Article 5.2.1})$$

$$\text{Excess Profit} = \text{Net GloBE Income} - \text{SBIE} \quad (\text{Article 5.2.2})$$

$$\text{Jurisdictional Top-Up Tax} = (\text{Top-Up Tax \%} \times \text{Excess Profit}) - \text{QDMTT} \quad (\text{Article 5.2.3})$$

Expected Deliverable

Singapore Top-Up Tax Calculation

Item	Formula	Your Answer
A. Net GloBE Income	From Task 1	€
B. ETR	From Task 1	%

Item	Formula	Your Answer
C. Top-Up Tax Percentage	$15\% - B$ (if $B < 15\%$)	%
D. SBIE	From Task 2	€
E. Excess Profit	$A - D$	€
F. Initial Top-Up Tax	$C \times E$	€
G. QDMTT Offset	From data provided	€
H. Jurisdictional Top-Up Tax	F - G	€

Ireland Top-Up Tax Calculation

Item	Formula	Your Answer
A. Net GloBE Income	From Task 1	€
B. ETR	From Task 1	%
C. Top-Up Tax Percentage	$15\% - B$ (if $B < 15\%$)	%
D. SBIE	From Task 2	€
E. Excess Profit	$A - D$	€
F. Initial Top-Up Tax	$C \times E$	€
G. QDMTT Offset	From data provided	€
H. Jurisdictional Top-Up Tax	F - G	€

Task 4: Entity Allocation Within Jurisdictions

Your Task

Allocate the Jurisdictional Top-Up Tax to individual Constituent Entities within each low-taxed jurisdiction.

Allocation Rule (Article 5.2.4): Top-Up Tax is allocated to CEs in proportion to their share of positive GloBE Income in the jurisdiction.

Expected Deliverable

Singapore Entity Allocation

Entity	GloBE Income	Share of Total	Allocated Top-Up Tax
SG Singapore Pte Ltd	€	%	€
SG Singapore Tech Pte Ltd	€	%	€
Total	€	100%	€

Ireland Entity Allocation

Entity	GloBE Income	Share of Total	Allocated Top-Up Tax
SG Ireland Ltd	€	%	€
SG Ireland IP Ltd	€	%	€
Total	€	100%	€

Task 5: IIR Allocation to Parent Entities

Data Provided (Ownership Details)

Singapore Ownership Chain:

```
Stratos Group plc (UK) – 100%
└── SG Holdings Ltd (UK) – 100%
    └── SG Netherlands BV (Netherlands) – 100%
        └── SG Singapore Pte Ltd (Singapore) – 100%
            └── SG Singapore Tech Pte Ltd (Singapore) – 100%
```

Ireland Ownership Chain:

```
Stratos Group plc (UK) – 100%
└── SG Holdings Ltd (UK) – 100%
    └── SG Netherlands BV (Netherlands) – 60% ← 40% held by External Investor A
        └── SG Ireland Ltd (Ireland) – 100%
            └── SG Ireland IP Ltd (Ireland) – 100%
```

Note: External Investor A is not part of an MNE Group subject to Pillar Two.

Your Task

Calculate the Allocable Share under IIR for each parent entity in the ownership chain.

IIR Allocation Formula (Article 2.2):

```
Allocable Share = Entity Top-Up Tax × Inclusion Ratio
Inclusion Ratio = (GloBE Income – Amount to other owners) ÷ GloBE Income
```

Expected Deliverable

Singapore IIR Allocation

Step	Calculation	Result
1. Singapore jurisdictional Top-Up Tax	From Task 3	€
2. Stratos's ownership of Singapore entities	Direct + indirect	%
3. Stratos's Inclusion Ratio	(Based on 100% ownership)	%
4. Stratos's Allocable Share (IIR)	Top-Up Tax × Inclusion Ratio	€

Ireland IIR Allocation

Work through the ownership chain to determine IIR allocation:

Step	Description	Calculation	Result
1	Ireland jurisdictional Top-Up Tax	From Task 3	€
2	SG Netherlands BV ownership of Ireland entities	Direct	%
3	External Investor's share of GloBE Income	40% of Ireland GloBE Income	€
4	Netherlands Inclusion Ratio in Ireland	(Total – External share) ÷ Total	%
5	Netherlands Allocable Share (if Netherlands IIR applies)	Top-Up Tax × Netherlands Ratio	€
6	Stratos's ownership of Netherlands	Via SG Holdings	%
7	Stratos's Allocable Share (IIR)	Netherlands share × Stratos ownership	€

Question: Does the 40% external investor portion get collected under IIR?

Task 6: Determine if UTPR Applies

Your Task

Analyse whether any Top-Up Tax remains uncollected after IIR and determine if UTPR allocation is required.

Expected Deliverable

Singapore Analysis

Item	Value	Notes
A. Total Singapore Top-Up Tax	€	From Task 3
B. IIR Allocable Share (Stratos)	€	From Task 5
C. IIR collection rate	%	$B \div A$
D. Residual for UTPR	€	$A - B$

Conclusion: Does UTPR apply to Singapore? _____

Ireland Analysis

Item	Value	Notes
A. Total Ireland Top-Up Tax	€	From Task 3
B. IIR Allocable Share (Stratos)	€	From Task 5
C. External Investor share	€	40% not collected under IIR
D. IIR collection rate	%	$B \div A$
E. Residual for UTPR	€	$A - B$

Conclusion: Does UTPR apply to Ireland? _____

Task 7: UTPR Allocation (If Applicable)

Data Provided

Stratos Group UTPR Jurisdiction Data (Qualified UTPR jurisdictions only)

Jurisdiction	Eligible Employees	Tangible Assets (€M)
UK	450	85.0
Netherlands	95	18.5
Germany	185	32.0
France	120	22.5
Total	850	158.0

Your Task

If UTPR applies (from Task 6), allocate the residual Top-Up Tax across UTPR jurisdictions using the substance-based formula.

UTPR Allocation Formula (Article 2.6):

$$\text{UTPR \%} = (\text{Employee Factor} \times 50\%) + (\text{Tangible Asset Factor} \times 50\%)$$

$$\text{Employee Factor} = \text{Jurisdiction employees} \div \text{Total UTPR employees}$$

$$\text{Asset Factor} = \text{Jurisdiction assets} \div \text{Total UTPR assets}$$

Expected Deliverable

UTPR Percentage Calculation

Jurisdiction	Employees	Emp Factor	Assets (€M)	Asset Factor	Emp×50%	Asset×50%	Uo%
UK	450	%	85.0	%	%	%	%
Netherlands	95	%	18.5	%	%	%	%
Germany	185	%	32.0	%	%	%	%
France	120	%	22.5	%	%	%	%
Total	850	100%	158.0	100%			100%

UTPR Allocation of Residual Top-Up Tax

Jurisdiction	UTPR %	Residual × UTPR %	Allocated UTPR
UK	%	€	€
Netherlands	%	€	€
Germany	%	€	€
France	%	€	€
Total	100%		€

Task 8: Complete Top-Up Tax Summary

Your Task

Prepare a summary of all Top-Up Tax allocations for Stratos's FY 2025 GIR filing.

Expected Deliverable

Top-Up Tax Summary by Mechanism

Source Jurisdiction	Total Top-Up Tax	IIR Amount	UTPR Amount	Collection Rate
Singapore	€	€	€	%
Ireland	€	€	€	%
Total	€	€	€	%

Top-Up Tax by Collecting Jurisdiction

Collecting Jurisdiction	Mechanism	Source	Amount
UK (Stratos Group plc)	IIR	Singapore	€
UK (Stratos Group plc)	IIR	Ireland	€
UK	UTPR	Ireland (residual)	€
Netherlands	UTPR	Ireland (residual)	€
Germany	UTPR	Ireland (residual)	€
France	UTPR	Ireland (residual)	€
Total			€

Model Answers

Task 1: ETR Calculation

Singapore ETR Calculation

Item	Formula	Answer
A. Total GloBE Income	€12,500,000 + €4,800,000	€17,300,000

Item	Formula	Answer
B. Total GloBE Losses	No losses	€0
C. Net GloBE Income	$€17,300,000 - €0$	€17,300,000
D. Adjusted Covered Taxes	$€1,562,500 + €600,000$	€2,162,500
E. ETR	$€2,162,500 \div €17,300,000$	12.50%
F. Low-taxed?	$12.50\% < 15\%$	Yes

Ireland ETR Calculation

Item	Formula	Answer
A. Total GloBE Income	$€5,200,000 + €2,100,000$	€7,300,000
B. Total GloBE Losses	No losses	€0
C. Net GloBE Income	$€7,300,000 - €0$	€7,300,000
D. Adjusted Covered Taxes	$€650,000 + €262,500$	€912,500
E. ETR	$€912,500 \div €7,300,000$	12.50%
F. Low-taxed?	$12.50\% < 15\%$	Yes

Task 2: SBIE Calculation

Singapore SBIE Calculation

Item	Formula	Answer
A. Eligible Payroll Costs	From data	€14,600,000
B. Payroll Rate (FY 2025)	Transition rate	9.8%

Item	Formula	Answer
C. Payroll Carve-Out	$\€14,600,000 \times 9.8\%$	€1,430,800
D. Tangible Assets NBV	From data	€17,300,000
E. Asset Rate (FY 2025)	Transition rate	7.8%
F. Asset Carve-Out	$\€17,300,000 \times 7.8\%$	€1,349,400
G. Total SBIE	$\€1,430,800 + \€1,349,400$	€2,780,200

Ireland SBIE Calculation

Item	Formula	Answer
A. Eligible Payroll Costs	From data	€5,200,000
B. Payroll Rate (FY 2025)	Transition rate	9.8%
C. Payroll Carve-Out	$\€5,200,000 \times 9.8\%$	€509,600
D. Tangible Assets NBV	From data	€3,050,000
E. Asset Rate (FY 2025)	Transition rate	7.8%
F. Asset Carve-Out	$\€3,050,000 \times 7.8\%$	€237,900
G. Total SBIE	$\€509,600 + \€237,900$	€747,500

Task 3: Top-Up Tax Calculation

Singapore Top-Up Tax Calculation

Item	Formula	Answer
A. Net GloBE Income	From Task 1	€17,300,000

Item	Formula	Answer
B. ETR	From Task 1	12.50%
C. Top-Up Tax Percentage	$15\% - 12.50\%$	2.50%
D. SBIE	From Task 2	€2,780,200
E. Excess Profit	$€17,300,000 - €2,780,200$	€14,519,800
F. Initial Top-Up Tax	$2.50\% \times €14,519,800$	€362,995
G. QDMTT Offset	No Singapore QDMTT	€0
H. Jurisdictional Top-Up Tax	$€362,995 - €0$	€362,995

Ireland Top-Up Tax Calculation

Item	Formula	Answer
A. Net GloBE Income	From Task 1	€7,300,000
B. ETR	From Task 1	12.50%
C. Top-Up Tax Percentage	$15\% - 12.50\%$	2.50%
D. SBIE	From Task 2	€747,500
E. Excess Profit	$€7,300,000 - €747,500$	€6,552,500
F. Initial Top-Up Tax	$2.50\% \times €6,552,500$	€163,813
G. QDMTT Offset	Ireland QDMTT paid	€163,813*
H. Jurisdictional Top-Up Tax	$€163,813 - €163,813$	€0

*The Ireland QDMTT fully covers the Top-Up Tax due.

Important Finding: Ireland has no residual Top-Up Tax for IIR/UTPR because the Irish QDMTT already collects the full amount.

Task 4: Entity Allocation Within Jurisdictions

Singapore Entity Allocation

Entity	GloBE Income	Share of Total	Allocated Top-Up Tax
SG Singapore Pte Ltd	€12,500,000	72.25%	€262,264
SG Singapore Tech Pte Ltd	€4,800,000	27.75%	€100,731
Total	€17,300,000	100%	€362,995

Ireland Entity Allocation

Entity	GloBE Income	Share of Total	Allocated Top-Up Tax
SG Ireland Ltd	€5,200,000	71.23%	€0*
SG Ireland IP Ltd	€2,100,000	28.77%	€0*
Total	€7,300,000	100%	€0*

*Ireland Top-Up Tax is €0 after QDMTT offset.

Task 5: IIR Allocation to Parent Entities

Singapore IIR Allocation

Step	Calculation	Result
1. Singapore jurisdictional Top-Up Tax	From Task 3	€362,995
2. Stratos's ownership of Singapore entities	$100\% \times 100\% \times 100\%$	100%
3. Stratos's Inclusion Ratio	No external ownership	100%
4. Stratos's Allocable Share (IIR)	$€362,995 \times 100\%$	€362,995

The UK (Stratos Group plc) applies its Qualified IIR and collects the full €362,995.

Ireland IIR Allocation

Step	Description	Calculation	Result
1	Ireland jurisdictional Top-Up Tax	From Task 3	€0
2-7	IIR allocation	Not applicable	€0

No IIR allocation required for Ireland because the QDMTT has already collected the Top-Up Tax.

Answer to Question: The 40% external investor portion is irrelevant in this case because Ireland's QDMTT collected 100% of the Top-Up Tax. If there had been residual Top-Up Tax, the external investor's 40% share would not be collected under IIR (since the investor is not part of an MNE Group). That portion would flow to UTPR.

Task 6: Determine if UTPR Applies

Singapore Analysis

Item	Value	Notes
A. Total Singapore Top-Up Tax	€362,995	From Task 3
B. IIR Allocable Share (Stratos)	€362,995	From Task 5
C. IIR collection rate	100%	Full collection
D. Residual for UTPR	€0	A – B

Conclusion: UTPR does **not** apply to Singapore. The UK IIR collects 100%.

Ireland Analysis

Item	Value	Notes
A. Total Ireland Top-Up Tax	€0	After QDMTT offset
B. IIR Allocable Share	€0	Nothing to allocate
C. External Investor share	€0	N/A
D. IIR collection rate	N/A	No Top-Up Tax due
E. Residual for UTPR	€0	Nothing remaining

Conclusion: UTPR does **not** apply to Ireland. The Irish QDMTT already collected the Top-Up Tax.

Task 7: UTPR Allocation

No UTPR allocation required for FY 2025 because:

1. Singapore Top-Up Tax: 100% collected under UK IIR
2. Ireland Top-Up Tax: 100% collected under Irish QDMTT

The UTPR calculations are therefore **not applicable** in this case study. The UTPR allocation template is provided for reference if there had been residual Top-Up Tax.

What If Scenario: If Ireland did NOT have a QDMTT, the 40% external investor share (€65,525) would flow to UTPR allocation across UK, Netherlands, Germany, and France using the substance-based formula.

Task 8: Complete Top-Up Tax Summary

Top-Up Tax Summary by Mechanism

Source Jurisdiction	Total Top-Up Tax	QDMTT	IIR Amount	UTPR Amount	Collection Rate
Singapore	€362,995	€0	€362,995	€0	100%
Ireland	€163,813	€163,813	€0	€0	100%
Total	€526,808	€163,813	€362,995	€0	100%

Top-Up Tax by Collecting Jurisdiction

Collecting Jurisdiction	Mechanism	Source	Amount
Ireland (QDMTT)	QDMTT	Ireland	€163,813
UK (Stratos Group plc)	IIR	Singapore	€362,995
Total			€526,808

Learning Points

- QDMTT eliminates IIR/UTPR obligation** — Ireland's domestic top-up tax means Stratos has no additional IIR liability for Ireland, regardless of the 40% external investor.
- The three-step GloBE Calculator workflow matters** — You cannot calculate allocation without first computing ETR (Step 1), SBIE (Step 2), and Top-Up Tax (Step 3).

3. **Jurisdictional blending affects ETR** — Both Singapore entities' income and taxes are combined for a single Singapore ETR of 12.50%.
 4. **SBIE reduces the Top-Up Tax base significantly** — Singapore's SBIE of €2.78M reduced the excess profit from €17.3M to €14.5M, lowering the Top-Up Tax by approximately €70,000.
 5. **100% ownership simplifies IIR** — When the UPE has 100% direct/indirect ownership, the Inclusion Ratio is 100% and all Top-Up Tax is collected under the UPE's IIR.
 6. **External investors create potential UTPR situations** — The 40% external investor in Ireland would have created a UTPR situation if Ireland had no QDMTT.
 7. **Check qualified IIR/UTPR status early** — Knowing that UK has Qualified IIR determined that Stratos Group plc would be the collecting entity.
 8. **Document the complete calculation chain** — The GIR filing requires disclosure of each step: ETR, SBIE, Top-Up Tax, entity allocation, and parent allocation.
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GIR Filing Integration

The calculations completed in this case study feed directly into the following GIR sections:

GIR Section	Data Source	This Case Study Task
Section 2: Jurisdictional ETR	ETR by jurisdiction	Task 1
Section 2: SBIE	Payroll and asset carve-outs	Task 2
Section 2: Top-Up Tax	Jurisdictional Top-Up Tax	Task 3
	CE-level Top-Up Tax	Task 4

GIR Section	Data Source	This Case Study Task
Section 3: Entity Allocation		
Section 4: IIR Amounts	Parent Allocable Shares	Task 5
Section 5: UTPR Amounts	UTPR allocation by jurisdiction	Task 7 (if applicable)

Use **GIR-004 GIR Practice Form** to practice entering this data in the official filing format.

Alternative Scenario: What If Ireland Had No QDMTT?

For additional practice, recalculate Tasks 5-8 assuming Ireland has **no QDMTT**:

Revised Ireland Top-Up Tax: €163,813 (no offset)

Revised IIR Allocation: - Stratos's 60% share: $\text{€163,813} \times 60\% = \text{€98,288}$ (UK IIR) - External Investor's 40%: $\text{€163,813} \times 40\% = \text{€65,525}$ (not collected under IIR)

UTPR Allocation of €65,525:

Jurisdiction	UTPR %	Allocated
UK	53.75%*	€35,220
Netherlands	11.85%*	€7,765
Germany	21.22%*	€13,904
France	13.18%*	€8,636
Total	100%	€65,525

*Based on the 50/50 employee/asset formula from Task 7 data.

This alternative scenario demonstrates the UTPR backstop function when IIR does not achieve full collection.

Next Step

You have completed Part 2: The Charging Mechanism. You understand how to:

- Calculate ETR, SBIE, and Top-Up Tax using GIR-001 - Allocate Top-Up Tax to entities within a jurisdiction
- Determine parent Allocable Shares under IIR
- Apply UTPR when IIR does not achieve full collection

Proceed to **Part 3: Computing GloBE Income or Loss** to learn how to calculate the GloBE Income figures that feed into these calculations.